



## DOCTOR OF CLINICAL PSYCHOLOGY (DCLINPSY)

### Doctorate in Clinical Psychology : Main Research Portfolio

**1) The development and maintenance of Post Traumatic Stress Disorder (PTSD) in people who have perpetrated violent acts: A review of the literature; 2) Life is a rollercoaster...How parents cope with the Neonatal Unit experience; 3) An exploration of the construct of bitterness.**

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**Doctorate in Clinical Psychology:  
Main Research Portfolio**

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May 2014

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## Abstracts

### Main Project abstract

*Objectives:* Bitterness has been suggested to be a common psychological reaction to persistent adversity; however it has thus far been understudied. The objectives of the current study were therefore to: i) Develop a reliable and valid English language measure of bitterness, ii) Pilot this new measure within a clinical population, iii) Explore how the construct of bitterness relates to treatment outcome in psychological therapy, and iv) Determine whether bitterness accurately predicts suicidal ideation in clinical populations. *Design:* a cross sectional questionnaire design was used. *Method:* A new bitterness measure was developed incorporating ideas from existing literature and suggestions from experienced clinicians. This measure was completed by a non clinical group ( $n = 313$ ) and factor analysis was carried out on these data. The measure was then completed by a group of secondary care mental health service users ( $n = 31$ ) and compared with the non clinical sample,. Additional symptom focussed measures were also completed by the clinical group. *Results:* Factor analysis showed that the bitterness measure was comprised of four subscales (labelled here as “experience of a negative event”, “nihilism”, “unfairness” and “negative interpersonal experiences”). Good internal consistency and acceptable test-retest reliability was found. Bitterness was found to be related to rumination, in particular the brooding / analytical subtype of rumination. A significant relationship was found with some measures of anger, but no significant relationship was found between bitterness and depression. *Conclusions:* Bitterness may be a unique construct, conceptually distinct from anger and depression and closely associated with analytical rumination.

### Service Improvement Project abstract

*Objective:* The birth of a pre-term baby is an acutely stressful event for parents. Medical advances in the UK mean that more babies than ever before are requiring NICU care. Consideration of the psychological needs of parents will help them cope with the NICU environment, develop a bond with their baby and will create the best possible outcome for NICU babies. The study objective was therefore to interview parents in order to better understand factors which supported coping. *Design:* A consecutive sample of NICU parents participated in semi-structured interviews which focussed on their experience. *Setting:* A Level 2 NICU in the UK which had recently been rebuilt. *Participants:* Nine parents representing seven families from a UK NICU. *Methods:* Parents participated in semi-structured interviews about their experience of NICU. Thematic analysis was used to extract key themes from the data. *Results:* The main theme described the Emotional Rollercoaster of NICU. Additional themes identified factors which helped or hindered coping: Baby Wellbeing, Physical Environment and Other People. *Conclusion:* Parents identified a number of factors affecting

how they cope with the NICU experience. None of these alone explains positive coping, however the findings of this study give useful information about optimal NICU conditions to parental promote psycho-social wellbeing.

### **Critical Literature Review abstract**

A substantial amount of high quality research has been conducted exploring the development and maintenance of Post Traumatic Stress Disorder (PTSD) among people who witness or are victims of traumatic events. Well validated models of the disorder have led to the development of robust and effective treatment protocols. Scant attention has however been paid to the exploration of PTSD within individuals who perpetrate violent acts. There were, therefore, two broad aims of this review. The first was to review and summarise available evidence for the existence of PTSD in perpetrators, and the second was to synthesise this evidence in order to draw conclusions regarding the development and maintenance of PTSD in perpetrators and whether existing theoretical models may be applicable to this group of people. Overall, very few studies have been published in this area. There is preliminary evidence that PTSD can develop after perpetration of a violent act and that psychological therapy for such PTSD based on a cognitive model may be effective, taking account of key emotions such as guilt and shame.

## **Word Counts**

<b>Critical Review of Literature</b>	<b>6959 words</b>
<b>Service Improvement Project</b>	<b>4799 words</b>
<b>Main Research paper</b>	<b>5242 words</b>
<b>Executive Summary</b>	<b>525 words</b>
<b>Connecting Narrative</b>	<b>3077 words</b>

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Doctorate in Clinical Psychology  
University of Bath

### **Critical Review of Research Literature**

The development and maintenance of Post Traumatic Stress Disorder (PTSD) in people who have perpetrated violent acts: A review of the literature

**Trainee:** Sarah Mills

**First supervisor:** Josie Millar

**Second supervisor:** Paul Salkovskis

**Word count:** 6959 words

**Target journal:** Clinical Psychology Review.

This journal publishes literature reviews so seems an appropriate journal to target.

The development and maintenance of Post Traumatic Stress Disorder (PTSD) in people who  
have perpetrated violent acts: A review of the literature

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## **Abstract**

A substantial amount of high quality research has been conducted exploring the development and maintenance of Post Traumatic Stress Disorder (PTSD) among people who witness or are victims of traumatic events. Well validated models of the disorder have led to the development of robust and effective treatment protocols. Scant attention has however been paid to the exploration of PTSD within individuals who perpetrate violent acts. There were, therefore, two broad aims of this review. The first was to review and summarise available evidence for the existence of PTSD in perpetrators, and the second was to synthesise this evidence in order to draw conclusions regarding the development and maintenance of PTSD in perpetrators and whether existing theoretical models may be applicable to this group of people. Overall, very few studies have been published in this area. There is preliminary evidence that PTSD can develop after perpetration of a violent act and that psychological therapy for such PTSD based on a cognitive model may be effective, taking account of key emotions such as guilt and shame.

**Keywords:** *Post-Traumatic Stress Disorder, Perpetrators, Violence, Veterans*

## **Introduction**

Post Traumatic Stress Disorder (PTSD) is the diagnostic term used to describe the presence of a cluster of mental health symptoms which relate specifically to traumatic experiences. Estimates suggest that PTSD is relatively common within the adult population of developed countries. A recent study in the United States conducted using DSM-5 criteria (American Psychiatric Association, 2013) found a lifetime prevalence of 9.4% in adults for PTSD in relation to composite traumatic events and a lifetime rate of 8.3% for single event PTSD (Kilpatrick et al., 2013).

PTSD has been included in the American Psychiatric Association's Diagnostic & Statistical Manual of Mental Disorders (DSM) for more than thirty years since the publication of DSM-III in 1980. It is unusual in comparison to other more established disorders in that it was only included in the DSM-III after substantial lobbying by psychiatrists and advocate groups working with military veterans. The original proposal was for the inclusion of a 'post-Vietnam' syndrome which recognised the psychological consequences of deployment to the Vietnam War. Anecdotal reports suggest, however, that the cluster of symptoms now known as PTSD were displayed by soldiers many hundreds of years prior to that time.

Trimble (1985) offers a detailed description of the history of the PTSD concept, from early observations of 'soldier's heart' during the American Civil War to the creation of the term 'shell shock' during the First World War. Such a history has not received universal agreement though, and Jones & Wessely (2005) suggest perception of post-trauma symptoms has evolved and changed in response to shifting ideas of psychiatric disorder, distress and bravery. Debate continues as to whether a clear history of PTSD can be tracked over time or whether each conflict has "produce[d] its own distinct post combat disorders defined by a unique set of symptoms related to the technology...of the time." (E. Jones & Wessely, 2005p. ix ). What authors describe in retrospective attempts to provide etiological clarity may, in fact, be misleading clustering of distinct disorders.

Regardless of such disputes, what is clear from this history is that - prior to the present day - the concept of PTSD had largely been applied to those exposed to trauma through military experience, but the majority of the published literature focusses on 'victims' of other kinds of trauma. The current diagnostic criteria make clear that the triggering traumatic event must involve actual or threatened assault or death and it is commonly known – although perhaps less commonly acknowledged – that, as well as experiencing distressing events, those who are exposed to conflict may also be involved in perpetrating such events. The history of the PTSD concept therefore makes evident that such difficulties cannot only occur in those who have been 'victims' of traumatic events; it is plausible that PTSD could also develop following perpetration of a violent act, either as a result of experiences in combat (e.g. Maguen et al.,

2010), other occupational experiences (e.g. Gersons, 1989) or in the context of violent offending (as described by Harry & Resnick, 1986).

The earliest published description of PTSD in perpetrators of violence can be found in a series of three case reports regarding men in the United States who had all committed homicides (Harry & Resnick, 1986). Although the authors did not report assessing these men using any validated measure of PTSD, they describe them experiencing symptoms including emotional withdrawal, intrusive memories of the killing, nightmares and feelings of guilt. The authors conclude, based on clinical judgement, that the men were suffering from PTSD and that the traumatic event was the killing they had perpetrated.

In the years since the publication of these case reports there has been a simmering interest in the topic with further published case studies offering examples of perpetrators who suffer PTSD as a result of their own violent behaviour (Kruppa, 1991; Thomas, Adshead, & Mezey, 1994; Pollock, 1999; Rogers, 2000; Byrne, 2003). A number of researchers have explored the existence of perpetration-induced PTSD or specific symptoms of the disorder (e.g. intrusive memories) within an offender population (Papanastassiou, Waldron, Boyle, & Chesterman, 2004; C. Evans, Ehlers, Mezey, & Clark, 2007a; Crisford, Dare, & Evangeli, 2008) and within a population of military veterans (Henning & Frueh, 1997; MacNair, 2002). Regardless of whether the violence is 'sanctioned' (as is usually the case within the military or police) or 'unsanctioned' (as with offenders) there has not, as yet, been a comprehensive review of the literature in this area.

Perhaps it is uncomfortable to consider 'heroes' committing distasteful acts or to consider that perpetrators of violent crimes may experience intense suffering as a result of their actions. Whatever the reasons for this oversight, the development and maintenance of PTSD in perpetrators of violence has not been the subject of sufficient thought or debate. The one book chapter which has been written on the topic (Evans, 2010) focussed particularly on the presence of intrusive memories of violence and did not explicitly consider wider issues of development and maintenance of the disorder. The publication of case study material on this topic suggests that clinicians encounter such presentations, however the applicability of existing theory to this particular clinical problem has not yet been explored.

The cognitive model of PTSD (Ehlers & Clark, 2000) suggests that the disorder develops when a trauma and its consequences are processed in a way that violates previously held beliefs and produces a sense of continued current threat. Two processes are hypothesised to be key in producing this sense of threat: i) excessively negative appraisal of the trauma and its consequences, and ii) an impairment of autobiographical memory for the event combined with a strong associative memory and strong perceptual priming. Once activated, this sense of threat brings with it intrusive memories of the event, re-experiencing, hyper-arousal and other emotional responses. Individuals think and behave in particular ways in order to reduce the

sense of threat and to alleviate distress. These strategies are effective for a very short while but in the longer term prevent cognitive change and therefore maintain the disorder.

Under DSM 5, PTSD comprises part of the new Trauma- and Stressor-Related Disorders category, a shift away from its previous categorisation as an Anxiety Disorder. This change is based on a series of papers (e.g. Friedman, Resick, Bryant, & Brewin, 2011) which discuss the utility of the previous categorisation and the clinical value of the DSM 5 arrangement. It is also of note that the previously contentious Criterion A requirement that specified that an individual's response to the traumatic event must include feelings of fear, helplessness or horror has been removed as it was shown to have no predictive or diagnostic value in relation to PTSD (APA, 2013).

Such changes represent a move away from PTSD being perceived as predominantly a fear based disorder and provide an opportunity for explicit consideration of such self referential emotions as shame and guilt in the development of the disorder. The shame-based and guilt-based models of PTSD (Lee & Scragg, 2001) suggest two pathways to PTSD development in the context of this model: schema congruence and schema incongruence. Those authors suggest that it is the schema congruence pathway which leads to shame and guilt laden intrusions and prominent avoidance symptoms, as core beliefs about the self and others are reactivated. PTSD may also develop through a pathway of incongruence between self schema and the trauma experience. In this context PTSD is thought to represent a search for meaning as information related to the trauma does not fit with any current perception of the self.

Neither the cognitive model nor the guilt and shame based models explicitly consider pathways to the traumatisation of perpetrators. Both however have good face validity in considering the role of negative appraisals of trauma and strong emotions such as guilt and shame which may be especially prominent in some perpetrators.

The aim of this review is, therefore, to consider the development and maintenance of PTSD symptoms in perpetrators, both violent offenders and those who may commit violence in their occupational role. The review will consider specifically the applicability of the cognitive model of PTSD (Ehlers & Clark, 2000) to perpetrators of violence and will examine whether formulation with this clinical group may also be informed by the use of the guilt-based and shame-based models of PTSD (Lee & Scragg, 2001).

## **Method**

Given the relative paucity of research in this area, there are not a sufficient number of high quality studies which would lend themselves to inclusion within a systematic review or meta-analysis. This review will therefore take an evaluative form.

### *Definition of terms*

“Post Traumatic Stress Disorder” and “PTSD” refer to PTSD as described in DSM 5 (American Psychiatric Association, 2013). “PTSD symptoms” are considered to be those identified within the diagnostic criteria for PTSD. “Perpetrator” refers to an individual who has committed an act of violence against another person. Given the qualitatively different nature of the violence involved in road traffic accidents (RTAs) and the fact that violence may occur through omission of action as well as commission, it was considered outside the scope of this review to consider individuals who cause RTAs leading to death or injury of another. There is, however, some literature which suggests that these individuals may also develop PTSD as a consequence of their action / inaction (Lowinger & Solomon, 2004; Rassool & Nel, 2012).

### *Inclusion criteria*

Studies were selected for inclusion in the review if they met the following criteria:

- Publication in a peer-reviewed English language journal, or a foreign language journal where an English translation of the study was freely available
- A focus on prevalence, development or maintenance of PTSD in perpetrators of violent acts
- Inclusion of any measure of PTSD (e.g. self-report, clinician rated)
- Participants were aged 18 years old or over

No review articles or commentary pieces pertinent to the topic were found. One unpublished thesis was retrieved and included in this review due to its relevance to the subject (Curle, 1989).

### *Search procedure*

Potential studies to be included in the review were identified by an electronic search of five major academic literature databases: PsycInfo, EMBASE, PILOTS (A PTSD specific database), Google Scholar & Medline. The following words were searched both as key words and as part of the title of an article: ‘PTSD’ OR ‘post traumatic stress disorder’ OR ‘post traumatic’ AND ‘perpetrators’ OR ‘violent offenders’ OR ‘combat’ OR ‘perpetration induced traumatic stress’. This was a deliberately wide search strategy in order to find as many relevant studies as possible. A total of 26 papers relevant to the topic were found. One was discarded because the full reference could not be sourced (Bradley & Chesterman, 1995) leaving 25 papers for inclusion in this review.

### **Overview of studies**

The selected studies explored the presence of PTSD in four population groups: violent offenders, mentally ill violent offenders, military veterans and other occupational groups. All 25

papers were reviewed in terms of i) prevalence rates of PTSD within the population studied; ii) risk factors for the development of PTSD; iii) protective factors against the development of PTSD; iv) maintenance factors; and v) treatment of PTSD in perpetrators. Appendix i provides a summary of all the studies included in the review and key findings.

## **Characteristics of the studies**

### *Offender populations*

Fourteen of the papers reviewed focussed on violent offenders. Six of these presented case reports and eight reported a cross sectional design. Sample sizes ranged from one to eighty and samples were drawn from young offender institutions ( $n = 2$ ), prisons ( $n = 2$ ) special ( $n = 2$ ) or secure ( $n = 8$ ) hospital settings.

### *Military veteran studies*

All nine of the studies sampling military veterans were reported from the United States. Some studies (MacNair, 2002; Maguen et al., 2009; Van Winkle & Safer, 2011) conducted secondary analysis using data gathered as part of the National Vietnam Veterans Readjustment Survey (NVVRS; Kulka et al., 1990). One study recruited through a Veterans' Affairs Cooperative Study (Marx et al., 2010) at inpatient and outpatient Veterans' Clinics across the United States. One strength of this study is the use of the Structured Clinical Interview for DSM-III-R (SCID; R. Spitzer, 1989) to diagnose PTSD. Another study recruited from a PTSD clinic for veterans (Henning & Frueh, 1997) and is also strengthened by the use of the Clinician Administered PTSD Scale (CAPS; Blake et al., 1995). One further large scale study used data gathered through a post deployment screening programme (Maguen et al., 2010) and three others recruited through Veterans' Affairs and media advertising (Maguen et al., 2011; Pietrzak, Whealin, Stotzer, Goldstein, & Southwick, 2011; Maguen et al., 2013).

One study was included in this review which sampled another occupational group; police officers who had shot someone in the line of duty (Gersons, 1989). This study gathered retrospective report of symptoms as well as current symptoms and reports on the prevalence of each symptom within the DSM III diagnostic criteria.

## **i) Prevalence rates**

Not all of the studies reviewed reported prevalence rates of PTSD within the sample. For some this was because the sample was comprised entirely of individuals who met criteria for PTSD (Harry & Resnick, 1986; Hambridge, 1990; Kruppa, 1991; Thomas et al., 1994; Kruppa, Hickey, & Hubbard, 1995; Henning & Frueh, 1997; Pollock, 2000; Rogers, 2000;



Maguen et al., 2013) and for others prevalence was not the focus of the study (MacNair, 2002; Maguen et al., 2009; Van Winkle & Safer, 2011). Studies which did report prevalence rates are summarised by group below:

#### *Studies of violent offenders*

No studies have systematically explored the prevalence of PTSD in perpetrators of violent crime who have no history of mental health problems. The one published case study in this area (Pollock, 2000) suggests that it is possible for an individual with no prior psychiatric history to develop PTSD after committing a violent offence, however there is no further published literature to support this.

Three of the studies reviewed (Pollock, 1999; C. Evans et al., 2007a; C. Evans, Ehlers, Mezey, & Clark, 2007b) sampled mixed forensic populations where some participants had a history of mental health problems prior to the index offence and some not. These studies reported prevalence rates of current PTSD - assessed using either the PTSD Interview (Watson, Juba, Manifold, Kucala, & Anderson, 1991) or the PTSD Symptom Scale-Interview Version (Hembree, Foa, & Feeny, 2002) - at 5.7% and 52% respectively (the two Evans papers related to the same sample).

Pollock (1999) suggests that his figure is so substantial because his sample was comprised entirely of homicide perpetrators, however this was also the case in another study comprised of mentally ill perpetrators of homicide (Papanastassiou et al., 2004) which found a slightly lower rate of current PTSD at 42%. The larger cross sectional studies of special hospital populations (Curle, 1989; Kruppa et al., 1995; Pollock, 1999; C. Spitzer et al., 2001; Gray et al., 2003; Papanastassiou et al., 2004; C. Evans et al., 2007a, 2007b; Crisford et al., 2008) all report prevalence rates for current PTSD among their samples. These range from 5.7% (C. Evans et al., 2007b) to 52% (Pollock, 1999) with a median of 33% (Gray et al., 2003).

It is difficult to make comparisons with other findings because accurate estimates of overall prevalence of PTSD within forensic populations are hard to obtain. One review of the literature suggested that between 4 – 21% of sentenced prisoners (some with co-morbid mental health problems) meet criteria for PTSD (Goff, Rose, Rose, & Purves, 2007).

#### *Studies of veteran populations*

Three out of the nine studies concerning military veterans reported the overall percentage of their sample who, using PTSD screening tools, appeared to meet criteria for current PTSD. The screening tools used were either the PTSD Checklist – Military version (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996) or the Primary Care PTSD Screen (Prins et al., 2003), both of which have been shown to have good agreement with validated PTSD diagnostic tools (Blanchard et al., 1996; Prins et al., 2003). Interestingly these figures

cluster together and range from 20% (Maguen et al., 2011), through 21% (Pietrzak et al., 2011) to 22% (Maguen et al., 2010). Given that two of the studies come from the same research group this is perhaps not surprising. Lifetime rates of PTSD were not reported by the authors of these studies so it is not possible to compare them to rates reported by other authors in veteran populations (e.g. 39% by Bisson, 2007).

#### *Other studies*

Only one other study which met the criteria for this review was found (Gersons, 1989). This was conducted in The Netherlands and sampled prevalence of PTSD in police officers after shooting incidents. A lifetime rate of 46% was found in this sample.

### **ii) Risk factors in the development of PTSD in perpetrators of violence**

PTSD was originally conceptualised as a normal response to overwhelming trauma, with the traumatic event viewed as the key factor predicting development of difficulties (as described by Elwood, Hahn, Olatunji, & Williams, 2009). Variability in development of the disorder has, however, led researchers to place more emphasis on the exploration of individual vulnerabilities which may precipitate onset. A significant body of research exists regarding risk factors for the development of PTSD in adults exposed to trauma (e.g. Brewin, Andrews, & Valentine, 2000; Ozer, Best, Lipsey, & Weiss, 2003), however specific risk factors for perpetrators have not yet been investigated. Findings from general adult samples suggest that pre-trauma factors (e.g. previous trauma, childhood adversity and psychiatric history) may play a small role in conferring risk for PTSD but that peri and post trauma factors (particularly trauma severity, lack of social support and general life stress) have a more significant influence.

Given that all of the studies covered by this review were small *n* case studies or cross sectional in design, the findings in relation to risk factors for development of PTSD in perpetrators must be treated with caution. Given the methodological difficulties inherent in such designs it is not possible to conclude that any factors have been shown to be robustly associated with increased risk of PTSD in perpetrators. Many studies did not discuss possible risk factors at all and among those which did there are conflicting findings.

Only one of the studies reviewed (C. Evans et al., 2007b) gave explicit consideration to empirical investigation of risk factors. Those authors used theoretically driven hypotheses to examine intrusive memories in young offender perpetrators of violence. They found pre (lower anti social beliefs), peri (greater helplessness, fear, dissociation, data driven processing and lack of self referent processing) and post (more disorganised assault narratives, greater negative view of the self, negative interpretations of intrusive memories, perceived permanent change and self blame) trauma factors to be associated with the development of intrusive memories.

Risk factors proposed by other studies are all summarised below, despite the fact that many lack supporting empirical evidence.

### **Pre-trauma factors**

#### *Lack of education / low intelligence*

Lack of education has been found to be a predictor of PTSD in general adult samples and particularly so in military samples (Brewin et al., 2000; Iversen et al., 2008). Most of the studies reviewed did not measure intelligence or use a proxy measure such as years of education. Two of the studies in the review did employ measures of intelligence (Maguen et al., 2011; Maguen et al., 2013) and the findings of these studies concur with the extant literature. The only other study to report findings in this area however did not find lower intelligence to be a significant predictor of PTSD symptoms (C. Evans et al., 2007b).

#### *Early life adversity & previous trauma*

Early life adversity has been found to be a risk factor for PTSD in adults (Brewin et al., 2000) and previous trauma has also been shown to hold predictive value (Brewin et al., 2000; Ozer et al., 2003). A history of early adverse life events was found to be predictive of PTSD in one study (Crisford et al., 2008), although another did not find a significant relationship (Papanastassiou et al., 2004). The criteria used for adversity differed between the two studies. No other studies examined previous trauma or early adversity.

#### *Relationship with the victim*

Killing a family member was found to predict PTSD in one study (Papanastassiou et al., 2004), however other studies have not found the relationship with the victim to be predictive of PTSD (Gray et al., 2003; Crisford et al., 2008). It has been suggested that violence towards a family member or a stranger confers increased likelihood for the development of PTSD in comparison to violence towards an intimate partner (Thomas et al., 1994) because attribution of blame for the violence, and development of subsequent guilt, may differ within a conflictual intimate relationship.

### **Peri-traumatic factors**

#### *Offence severity*

Trauma severity has been shown to confer risk for PTSD in both civilian and military samples (Brewin et al., 2000). In perpetrator groups this translates to offence severity which was found to predict PTSD in one study (Crisford et al., 2008). Another paper reported that offenders who had killed as opposed to seriously injured their victim showed a marginally significantly higher level of overall PTSD symptoms scores as well as marginally more

intrusive symptoms (Gray et al., 2003). None of the other forensic studies explored the relationship between offence severity and PTSD.

In a veteran population the pattern of PTSD symptoms was found to be more severe in those who had killed when compared to those who had not (MacNair, 2002) and killing was found to be a significant predictor of PTSD even after controlling for other factors such as witnessing violence and general combat exposure (Maguen et al., 2009; Maguen et al., 2010; Maguen et al., 2011; Van Winkle & Safer, 2011).

Ozer (2003) also found that perceived threat to life during trauma was a risk factor for development of PTSD in adults. This was investigated by Evans et al. (2007b), yet perceived threat during assault was not found to be significantly related to the development of intrusive memories.

#### *Having an affective disorder at the time of the trauma*

Having a pre-existing affective disorder at the time of the traumatic event was found to confer vulnerability to the development of PTSD in relation to the trauma (Rogers, 2000; Gray et al., 2003) and participants with a history of psychiatric disorder were more likely to develop intrusive memories of their violence (C. Evans et al., 2007b). These findings concur with both Brewin (2000) and Ozer (2003) who showed that pre-existing psychiatric disorder or previous psychological adjustment were risk factors for PTSD development.

#### *Reactive rather than instrumental violence*

Reactive, unplanned violence was found to be associated with development of PTSD after homicide (Pollock, 1999). This finding may have some theoretical underpinnings in “discrepancy theories” of PTSD (see Brewin & Holmes, 2003 for a review) which suggest that the intrusive symptoms of PTSD develop due to an incompatibility between the behaviour and core beliefs or schema.

#### *Proximity of the offender to the victim*

Only one study explored the proximity of the perpetrator to violent injury or death. This was hypothesised to be important in the development of PTSD, however no association could be assessed as the majority of the offender sample had been in close proximity to the victim at the time of the offence by virtue of the methods used (e.g. stabbing, hitting). It is suggested that differences may be found in countries where use of firearms is more common, enabling the perpetrator to be further away from the victim (Gray et al., 2003). This was not considered in any of the other studies.

### *Emotional response during the trauma*

Peri-traumatic emotional responses have been shown to confer risk for PTSD (e.g. Ozer et al., 2003) but, by and large, these were not considered by the papers under review with the exception of Evans (2007b) summarised above.

### **Post-trauma factors**

#### *Guilt*

Guilt is a self conscious feeling that relates to feelings of responsibility and of causing harm to others. Guilty thoughts and feelings in relation to the offence were found to be associated with PTSD in a forensic sample (Crisford et al., 2008) and severity of PTSD symptoms- as measured by the Impact of Events Scale – Revised (IES-R, Weiss, 2004) - was found to be higher in those who felt remorse for their offence (Gray et al., 2003). The severity of guilt in relation to killing or injuring another was shown to be positively correlated with both re-experiencing and avoidance symptoms as well as to a general measure of PTSD in veteran samples (Henning & Frueh, 1997). Combat guilt was also found to fully mediate the relationship between participation in abusive violence and PTSD (Marx et al., 2010). However, one case study described a perpetrator of homicide who experienced PTSD yet denied any guilt or remorse about the offence (Pollock, 2000).

#### *Beliefs regarding whether the victim deserved the assault*

Offenders who believed their victim did not deserve assault/death scored significantly higher on total IES score, intrusive symptoms and avoidant symptoms than offenders who remained convinced their actions had been justified (Gray et al., 2003). This may relate in some way to the previously described assertion that attribution of blame for the violence is important in predicting PTSD (Thomas et al., 1994). Although not made explicit in the Gray (2003) paper, it may be that the pathways to PTSD in these cases were through the development of guilt or shame in relation to the act.

### **iii) Protective factors against the development of PTSD in perpetrators of violence**

None of the studies reviewed reached any firm conclusions about factors which might be protective against PTSD. One hypothesised that the commission of ‘sanctioned’ violence might be protective (Kruppa, 1991), however reports of PTSD in veterans who had killed in the socially sanctioned environment of combat would seem to contest this (e.g. Maguen et al., 2010).

Another study presented results which suggested that psychopathic traits were protective against development of PTSD (Pollock, 1999) which makes intuitive sense given that

lack of empathy or remorse are key features of the psychopathic profile although lacks any empirical basis.

#### **iv) The maintenance of PTSD in perpetrators of violence**

Few studies considered factors which might maintain PTSD in perpetrators of violence. All suggestions are summarised below:

##### *Guilt*

Those studies which did consider maintenance factors suggested that guilt is as important a factor in the maintenance of PTSD as it is hypothesised to be in the development of the disorder. Marx et al. (2010) suggest that guilt is possibly the mechanism which maintains PTSD in veterans who have been exposed to violence. These authors go on to suggest that avoidance symptoms of PTSD which occur in response to guilt cues prevent exposure to fear-based cues, thereby preventing appropriate cognitive processing of the trauma. Thomas et al. (1994) also suggest that feelings of guilt in perpetrators of homicide may serve a different maintaining function in that the feelings prevent the individual from accessing appropriate treatment because they see themselves as undeserving.

##### *Dissociation at the time of the trauma*

Maguen et al. (2013) suggest that the killing of another human being increases the likelihood of peri-traumatic dissociation. This dissociation minimises feelings associated with the killing and makes dissociation as a coping strategy more likely in the future. This in turn interferes with trauma processing and maintains PTSD by preventing exposure to, and updating of, the trauma memory.

##### *Co-morbid mental health difficulties*

The last hypothesised maintenance factor concerns co-morbid mental health difficulties. Where an individual had a pre-existing mental health condition which has not remitted, it has been suggested that this may prolong the course of PTSD and prevent emotional processing of the trauma (Crisford et al., 2008).

#### **v) Treatment**

Some authors suggest that engagement in offence focussed therapeutic work might precipitate the onset of PTSD in offenders (e.g. Gray et al., 2003; C. Evans, 2010). Therapeutic work could develop the offender's empathy for the victim and understanding that they did not deserve the assault, thus leading to the development or enhancement of feelings of shame and/or guilt about the offence. Gray et al. (2003) cite the case of CH described by Rogers et al. (2000)

in support of the assertion that engagement in treatment may precipitate onset of PTSD. Other authors suggest that treatment for a co-morbid condition may exacerbate symptoms of PTSD (Thomas et al., 1994). There is little evidence regarding the treatment of PTSD in perpetrators using the currently recommended psychological treatment (National Institute for Health & Care Excellence, 2005), only Pollock (2000) describes successful treatment using Eye Movement Desensitisation and Reprocessing (EMDR) and no reports have yet been published describing treatment of a perpetrator using trauma-focussed Cognitive Behaviour Therapy (tfCBT; Ehlers, Clark, Hackmann, McManus, & Fennell, 2005)

## **Conclusion**

This review has found emerging evidence for the existence of PTSD in perpetrators of violence. The literature in this area is still in its infancy and there is significant disagreement and uncertainty in the published findings. Tentative evidence has been found to suggest that risk factors for PTSD in perpetrators do not differ greatly from those shown in other groups. Lack of education, prior psychiatric disorder and early life adversity all appeared relevant; relationship to the victim was hypothesised to be important but, with the exception of one small study, this assertion lacks any supporting empirical evidence. No good evidence exists to suggest factors which may be protective against the development of PTSD in perpetrators. The strongest evidence was found for the role of guilt in the development of PTSD. Guilt is also hypothesised to play a maintaining role in the disorder alongside co-morbid mental health problems and post-traumatic dissociation.

These findings do concur with previous high quality reviews examining the development and maintenance of PTSD in ‘victims’ of trauma (Brewin et al., 2000; Ozer et al., 2003) and appear to fit superficially with the cognitive model of PTSD (Ehlers & Clark, 2000), however – with the exception of Pollock (1999) and Evans et al. (2007a, 2007b) - none of the studies made explicit links to theoretical models.

One factor which is hypothesised to be key in the development of PTSD in general groups is the sense of current threat (Ehlers & Clark, 2000). The theoretical mechanism by which this develops in perpetrator groups is not addressed by the literature explicitly. It has, however, been suggested that the current threat in PTSD in perpetrators is that of a future loss of control that would lead to loss of life (Kruppa, 1991); a kind of ‘self as threatening’ belief as opposed to cognitions about others or the world being unsafe which is often the case in victims of trauma. Rogers et al. (2000) report the treatment of a perpetrator who appeared to view herself as dangerous as a result of her offence. The patient (CH) had killed her employer by stabbing her with a carving knife. PTSD did not develop immediately, however CH was reported to have developed significant fear of knives some years after the offence and a belief

that she could kill again (“frightened by [knives] in case they make me kill again” p. 513). This led to a number of avoidance behaviours including using knives, reading about stabbings or watching any films containing stabbing scenes. This represents the only empirically based suggestion within the literature that perpetrators may also experience a sense of current threat, and that the threat may originate internally rather than externally.

The shame-based model of PTSD makes a distinction between internal and external shame, both of which are relevant to how an individual perceives and processes the traumatic experience. A perpetrator of a violent act may experience both internal shame (e.g. self critical and shameful thoughts) and external shame (e.g. shaming judgement and condemnation by others). Lee & Scragg (2001) suggest that primary shame develops as an individual perceives he or she may be losing value to others at the time of the event (e.g. when a perpetrator realises that his victim is dead), secondary shame is thought to develop after the event in light of reflection on what has happened. Working clinically with beliefs about others being shaming may have important relevance in treatment of offenders. Lee & Scragg (2001) suggest that careful assessment and challenging of beliefs about others and the world may be indicated where an individual reports intense experiences of external shame. Others, however, may indeed be shaming because the individual has committed a serious violent offence which is socially unacceptable.

Feelings of guilt in relation to the act are also hypothesised to be important. Guilt may lead individuals to try to repair the damage they have done through violence. However, in the case of perpetrators this may not be possible if their act has led to death. In such cases where the possibility of restitution is blocked, Kubany (1998) suggests that memories of the trauma may become so painful that greater avoidance behaviours are the outcome. It is therefore suggested that in chronic guilt – where restitution cannot be made – maladaptive ways of coping may develop, which may lead to the development of PTSD (Lee & Scragg, 2001). Kubany & Manke (1995) have identified four cognitive components of guilt commonly found in people who have experienced trauma i) violation of personal standards of right and wrong, ii) perceived responsibility for causing the event, iii) perceived lack of justification for actions taken, and iv) false beliefs about pre-outcome knowledge / hindsight bias. It seems plausible that these components of guilt apply equally well to perpetrators as to victims. When working with perpetrators it is important to consider that some guilt may result from cognitive distortion but some may be justifiable and may need a more acceptance based approach. In their study of a sample of military veterans, Henning & Frueh (1997) reported the presence of different types of guilt including guilt for acts of commission, for acts of omission/error, survival guilt, shame guilt and guilt regarding one’s thoughts and feelings.

Some might consider the diagnosis of PTSD in perpetrators who have carried out a violent act of their own volition – and by doing so, traumatised themselves - somewhat



unsavoury. Perhaps it could be construed as undermining the very valid experience of those who are victims of trauma and some might argue that post-traumatic symptoms serve a useful recidivist function in violent offenders. Whatever the moral view, it is evident that a percentage of people who commit violent acts – sanctioned or otherwise – do develop symptoms of post-traumatic stress and a sub-group of this population meet current diagnostic criteria for PTSD.

In conclusion, it appears that PTSD can develop in perpetrators of violent acts. The mechanisms by which this occurs are hypothesised to be similar to those for other groups, however further empirical work is needed. The cognitive model of PTSD (Ehlers & Clark, 2000) seems a good fit with particular consideration given to idiosyncratic guilt and shame based appraisals.

### **Limitations of the review**

The findings of this review need to be considered alongside the methodological limitations of the studies that were included. All of the larger studies reviewed were cross sectional in design which means that conclusions can only ever be drawn about correlation, not about causality. Very small sample sizes in some studies means that statistical analyses may have been underpowered and, although these papers are valuable in highlighting important clinical issues they offer limited generalisability of the findings. All of the studies concerning military veterans were conducted in the United States and may not generalise to UK and other military populations.

Estimates of PTSD in these American populations were also substantially higher than rates reported from the UK (Iversen et al., 2009; MacManus et al., 2014) which may reflect important differences in military experience between the two countries. Several of these studies recruited via a postal opt-in system which is vulnerable to bias or used secondary data analysis of a large retrospectively collected data set (NVVRS; The National Vietnam Veteran Readjustment Survey) which has already been the subject of some criticism in relation to the validity of the findings (McNally, 2003).

The majority of participants in studies were male. It is generally known that there are many more males than females in the Armed Forces and research shows that males are significantly more likely than females to commit a violent act (Office for National Statistics, 2013). This suggests that, despite their lower risk of developing PTSD overall, more males than females may present with perpetration-related PTSD. Given the absence of female participants, however, little is learnt about the impact of perpetration of violence on women (who are known to be at greater risk of developing PTSD e.g. Bisson et al., 2007; Kilpatrick et al., 2013).

Although some studies did use a well validated instrument like the SCID or CAPS, several of the studies used only clinical judgement or screening tools to assess for PTSD. This

means that prevalence rates of PTSD reported by these studies must be viewed with caution. Most of the case reports reviewed were descriptive and included few details about formulation, from these it is hard to learn about the development and maintenance of the patient's difficulties.

It is also important to consider the presence of confounding variables within the populations under study which may cloud the issue. Offenders typically have a history of adversity and experience of a number of traumatic events which make it difficult to draw valid conclusions from the data gathered by uncontrolled studies. The assessments of PTSD conducted within these studies did not take account of such confounds and in several cases relied on retrospective recall from some years previously so are also vulnerable to the bias inherent in this practice.

The use of 'veteran' as a keyword for this paper presents some difficulty as it was not used as an original search term. This means that the review of the data in relation to veterans may be skewed based on papers that were found using other search terms and may not be truly representative of the existing literature. The association of veterans with the term 'perpetrator' and the clustering of the veteran and offender groups together in this review may also raise strong negative feelings for some people, although this is a term used in relation to veterans by some of the papers reviewed.

### **Implications**

Further high quality research is needed in order to develop knowledge about the phenomenology of PTSD among perpetrators, particularly the relevance of hyperarousal symptoms which appeared less prominent in this group. Further exploration of the pre, peri and post traumatic factors which may influence development of PTSD within perpetrators of violence is necessary to test the hypotheses that these do not differ greatly from findings for other groups. There do appear to be additional factors, such as relationship with the victim and killing rather than assaulting, which appear to be relevant and require further examination. Experimental studies of treatment for perpetration induced PTSD in both offender and veteran samples are required to test the hypothesis that therapy informed by the cognitive model is applicable for these populations.

Consideration must be given to the fact that perpetrators are not an homogenous group. The social context for the commission of violence (e.g. sanctioned or otherwise) as well as the individual circumstances (e.g. killing another to save oneself as opposed to a seemingly unprovoked assault) are likely to influence the development of the disorder and the unique appraisals made by each individual.

This review has not addressed the question of whether PTSD in perpetrators should be treated, however it is recognised that this is considered by some to be morally contentious and may explain previous neglect of this area. Kruppa (1991) stipulates that when the symptoms are life threatening (i.e. when they include suicidal intent or actions) and when symptoms present a barrier to long term rehabilitation or treatment of comorbid disorders (Rogers, 2000), the PTSD should be treated. There is also a consideration around further risk to others; it is plausible that the presence of symptoms of PTSD might increase the risk of further violence (Kruppa et al., 1995) as well as alcohol use and domestic conflict (Maguen et al., 2013). Greater consideration needs to be given to the treatment of PTSD in violent offenders and further exploration of the risks and benefit of treatment for this group.

The overlap in symptoms between complicated grief reactions and PTSD was raised in two papers (Hambridge, 1990; Thomas et al., 1994). To consider this in full is outside the scope of this review but it is an area for further research. Both grief and post-traumatic reactions must be considered when formulating with individuals who have killed someone close to them and therapy intervention informed by whichever model appears most clinically useful.

One issue which requires further attention is the preparedness of perpetrators to seek help for their difficulties. More psychological therapy services are being established for military veterans yet availability specifically for this group and also for forensic populations – especially in prisons – remains inadequate. The anticipated consequences of disclosing their actions may also deter military personnel from asking for help. Clinical experience suggests that many veterans are not sure what they can talk about within the context of a therapy session, what remains subject to the Official Secrets Act and how they may be judged if they disclose perpetration of violence. Such issues may also be pertinent to serving personnel and could be considered within the military's trauma and stress debriefing programmes.

Consideration must also be given to the training and education of therapists who work with these populations and awareness of appropriate therapeutic models and the need to incorporate considerations of guilt and shame into standard trauma focussed CBT must be raised. Publication of further detailed case studies will help to increase knowledge and awareness and support the development of effective treatment protocols.

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Doctorate in Clinical Psychology  
University of Bath

**Service Improvement Project**

**Life is a rollercoaster...**  
**How parents cope with the Neonatal Unit experience**

**Trainee:** Sarah Mills

**Academic Supervisor:** Professor Paul Salkovskis

**Field Supervisor:** Dr Mike Osborn, Consultant Clinical Psychologist, Royal United  
Hospital, Bath

**Word count**

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**Journal to be targeted:** Journal of Gynaecological & Neonatal Nursing

This is a peer reviewed journal which is widely read within the NICU field

Life is a rollercoaster...  
How parents cope with the Neonatal Unit experience

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**Abstract**

*Objective:* The birth of a pre-term baby is an acutely stressful event for parents. Medical advances in the UK mean that more babies than ever before are requiring NICU care. Consideration of the psychological needs of parents will help them cope with the NICU environment, develop a bond with their baby and will create the best possible outcome for NICU babies. The study objective was therefore to interview parents in order to better understand factors which supported coping. *Design:* A consecutive sample of NICU parents participated in semi-structured interviews which focussed on their experience. *Setting:* A Level 2 NICU in the UK which had recently been rebuilt. *Participants:* Nine parents representing seven families from a UK NICU. *Methods:* Parents participated in semi-structured interviews about their experience of NICU. Thematic analysis was used to extract key themes from the data. *Results:* The main theme described the Emotional Rollercoaster of NICU. Additional themes identified factors which helped or hindered coping: Baby Wellbeing, Physical Environment and Other People. *Conclusion:* Parents identified a number of factors affecting how they cope with the NICU experience. None of these alone explains positive coping, however the findings of this study give useful information about optimal NICU conditions to parental promote psycho-social wellbeing.

**Keywords:** *NICU, family centred care*

## **Review of the literature**

Increasing fertility rates, greater availability of assisted conception and other advances in reproductive medicine mean that more pregnancies in the UK are viable than ever before. One impact of these advances is that the number of babies requiring specialist NICU care is rising year on year. For example, the demand for specialist neonatal care in England increased by 9% in the years from 2006-2009 and between 1995 – 2006 there was an 8 - 10% increase in survival rates in babies born at less than 26 weeks gestation (Department of Health, 2009). This means that the lives of an ever growing number of babies and families are being shaped by their experience of the NICU environment.

The highly technical and medically focussed NICU is vital in giving babies the best possible chance in life. In this busy and pressured environment there is, however, a risk that scant attention is paid to the psychological needs of both babies and families. These are understandably often perceived as secondary to keeping a baby alive. It is easy, however, to make a case for considering psychological needs. Research shows that mothers with existing mental health problems are at higher risk of premature delivery or having a lower birth weight baby (Department of Health, 2009), that mothers of pre-term infants experience higher levels of post-natal depression (e.g. Davis, Edwards, Mohay, & Wollin, 2003), are at increased risk of relationship problems, family stress & financial problems than their counterparts with full term babies (e.g. Carter, Mulder, & Darlow, 2007) and that a preterm birth impacts negatively on the attachment relationship between mother and baby and on maternal responsiveness to the infant (T. Evans, Whittingham, & Boyd, 2012). Stress impacts on parents' ability to interact with their child, which in turn has been shown to be associated with poorer child outcomes (Voos et al., 2011). Supporting parents to cope in the early weeks and months of their child's life thereby enabling them to provide the best possible home environment for their baby seems an obvious way to mediate this impact.

One's baby being admitted to NICU immediately after birth could be considered one of the most stressful parental experiences. A number of researchers have outlined specific ways in which time spent in NICU is stressful and exploration of these aspects may be approached from both a cognitive and an attachment perspective. Carter et al. (2007) suggest that four specific aspects of the NICU experience can exacerbate stress for parents: the physical environment, the baby's physical appearance or behaviour, staff-parent interactions and alterations in the parental role. All of these aspects may be understood within a cognitive framework of anxiety and threat (Salkovskis, 1996). Both the perceived likelihood and perceived awfulness of a possible outcome are important in determining evaluation of threat. If parents perceive the likelihood of a negative outcome for their child as being high, this combined with the anticipated awfulness of such an outcome may predict anxiety and stress in parents.

The natural parental drive to bond with one's baby (as first described by Bowlby, 1958) must not be forgotten. Giving care to a newborn infant is a fundamental maternal attachment behaviour, and one which is disrupted within the NICU environment (as described by Feldman, Weller, Leckman, Kuint, & Eidelman, 1999; Obeidat, Bond, & Callister, 2009). The experience of the NICU parent is often that of being one of many people caring for their child. This exists in sharp contrast to the expectation held by many parents antenatally of developing rich, strong bonds through caring for their baby in their own home. Such a dichotomy between the anticipated outcome of pregnancy and the actuality of parents' experience must be considered an important factor in predicting coping.

This friction between reality and expectation is recognised by the 2009 Toolkit for High Quality Neo-Natal Services, in which the Department of Health (DoH) identified 'Care of the baby and family experience' as one of the eight key principles for quality neonatal services. The Toolkit promotes "a family centred philosophy of care that helps families whose baby is in hospital to cope with the stress, anxiety and altered parenting roles that accompany their baby's condition." (Department of Health, 2009, p. 21) and goes on to suggest that the physical, psychological and social needs of babies and families are held at the heart of all care given, with the aim of enhancing attachment and improving long term outcomes.

The DoH toolkit is intended to support the advancement of NICU practice across the UK. A new NICU was designed and built with this in mind and it was hoped that the new lighter, more spacious environment would facilitate better parent experience and more positive baby outcomes. Parents with babies in the previous NICU had been interviewed about their experience of the environment. They described the old unit as "uncomfortable" and "cramped" (Reid, 2010) and did not like having to leave their babies frequently to make space for staff and other parents. To this end, the present research was conceptualised as a way to understand better the experience of families and to consider issues of stress in relation to the new NICU. In order to do this a semi structured interview guided by cognitive and interactive views of stress in this context was conducted with a sample of NICU parents. It was intended to examine some of the themes around stress and coping which developed from these interviews and use these to inform recommendations for service improvement.

## **Method**

### **Service context**

The Dyson Centre for Neonatal Care at the Royal United Hospital in Bath was built during 2010-11, following investment through the 'NICU Space to Grow Campaign'; a partnership project between the public and charitable sectors. The purpose of the Space to Grow Campaign was to build a NICU which offered excellent foundations for the introduction of developmental care in an environmentally friendly way. A research grant of £92,000 was

awarded by The Dyson Foundation to measure the impact of the new building on staff, parents and infants. This paper describes the use of semi structured interviews to explore parent perceptions of the environment and overall NICU experience.

Scoping for the interviews took place in various ways. Informal conversations were conducted with a variety of staff members on the NICU (including the modern matron, nurse practitioner, qualified nurses and nursery nurses). The researcher also spent time in the NICU, sitting in the various rooms and observing the environment.

### **Participants**

Participants were mothers and fathers of pre-term babies born at 26 weeks or later. They were recruited through the NICU during June and July 2012. All families who met the study criteria during the time frame were approached and asked to participate in the project (approximately 30 families were initially approached). Parents were asked for their consent to be interviewed about their experience of NICU. Seven families consented to be interviewed; either prior to their baby's discharge from the unit and/or 6 weeks after discharge. This represented 70% of the ten families recruited to the larger research project. Three families had twin births and four families had singleton babies. Two of the families already had at least one other child and the other five families were first time parents. All had been on the NICU for at least four weeks before the discharge interview took place. For all seven families the mother and father remained in an intimate relationship with each other at the time of interview.

### **Procedure**

Parents were approached by the NICU Research Nurse and asked for consent to be interviewed. An interview with the researcher (a Clinical Psychologist in Training) was then arranged at a time convenient to the parents. Face to face semi structured interviews were conducted with eight parents (five mothers and three fathers), representing six families and a short telephone conversation took place with one additional mother from the seventh family. All pre-discharge interviews took place in a private room in the NICU and the 6 week follow up interviews took place at the family's homes. All interviews were audio taped and field notes were taken during the telephone conversation.

The interviews began with each parent being asked to give an account of how their infant(s) came to be in NICU. Parents were encouraged to speak freely about their experience and to focus on aspects which felt important to them. The interviewer probed for more detail when issues around coping were raised. In each interview parents were asked three questions:

- i) How wound up & anxious have you been over the last week? (On a scale of 1 – 10)
- ii) Can you describe what it has been like for you to be on the unit over the last week?
- iii) Have any aspects of the NICU environment been difficult to deal with?

Parents were also asked for their thoughts on the NICU environment and impact on the staff as well as on themselves. All parents were offered the opportunity to make additional comments at the end of the interview. At the follow up interviews parents were asked to revisit the questions from the initial interview and reflect on their experience now that some time had passed.

### **The researcher's perspective**

The first author of this paper is a mother. She had no prior experience of NICU, having had a healthy, full term baby herself.

### **Analysis**

All interviews were transcribed verbatim and then checked against the tape recordings for accuracy. Transcripts were interrogated using thematic analysis conducted from a realist position, assuming that parents' accounts were accurate representations of their experience and that meaning could be theorised from these accounts in a relatively straightforward way. An inductive approach was taken to the initial analysis, enabling themes to be developed from the data without influence of previous research findings.

The researcher initially read and re-read the transcripts and field notes to immerse herself in the data. Thematic analysis was then conducted following the six phases laid out by Braun & Clarke (2006). Once initial themes had been identified all transcripts were re-read to ascertain whether the collected themes appeared to fit with the data. Themes were further refined at this point. The themes were then reviewed by two other researchers and assessed for goodness of fit with the data. Suggestions were made for further refinement of some themes, however overall agreement between researchers was good.

### **Findings**

Four key themes were extracted from the interview data, mostly comprised of positive elements but with some examples of factors which hinder coping. The four themes are 1) 'Rollercoaster of Emotions'; 2) 'Baby Wellbeing'; 3) 'Physical Environment'; and 4) 'Other People'. Other People is sub divided into 'In The Same Boat', 'A Matter of Choice', 'Talking Helps', 'Feeling Involved' and 'Flexibility'. Each theme is discussed in more detail below, however due to restrictions of word length only very brief descriptions are given.

#### **1. Rollercoaster of emotions**

Interwoven with themes around coping was talk about the emotional rollercoaster of the NICU experience. The fact that having a baby generates a range of emotions will not come as news to any parent. Having a baby in the unfamiliar environment of NICU, however, intensifies

this experience. Parents talked about feelings of guilt, anxiety, fatigue, joy and apprehension characterising their experience. They perceive these as interacting with the emotional experience of other parents which is naturally shared when families spend so much time together (as illustrated by the quote from NFG mother below). This theme also speaks to the importance of peer relationships. Parents talked about how other parents had prepared them for the rollercoaster and helped to normalise the ups and downs they experienced. All parents interviewed described this theme. These descriptions encapsulate the essence and unpredictability of the NICU experience and set the stage for exploration of other themes.

*“One of the first things I remember being told about a NICU unit...was that this is a rollercoaster...you have your highs, you have your lows...it is completely a whirlwind...”*

(NFF mother p.2)

*“It’s a very emotional place to be...you understand the emotion that other people are going through even if you’re not...for example I was sitting there and a Mum came in to visit her baby for the first time and just burst into tears and I burst into tears because you... completely understand every single emotion that’s just...and that’s very emotional.”*

(NFG mother p.13)

### **The physical environment**

Parents did not talk spontaneously about the environment during the interviews. The building of the new unit seems to have created space for mothers and fathers to focus on parenting and the quality of their experience. All parents spoke in positive terms about the environment when asked directly and all but one suggested they were less stressed than they would have been in a different environment. Two mothers suggested that the environment had helped them to bond with their babies, although others did not make this association. All parents were aware that the unit was new and several commented that they thought being in the old NICU would have made their experience more stressful but only one mother had actually experienced having babies in both units so was able to make a comparison. Other parents had experienced other NICUS and spoke about how the Bath NICU compared favourably against others in terms of space and access to babies. The environment is therefore viewed as an important positive foundation upon which other aspects of the experience can sit.

*“[It is] amazing compared to the old NICU which was quite compact...very cramped”*

(NFE mother, field notes)

*“I don’t know that it would have been as easy to build that bond, to have the quality time, to*



*sit with him for hours cuddling...without the comfort of the NICU unit we're in now."*

(NFF mother p.9)

*"I think the environment is...it's on a stress level, if you're in a poor environment, you're going to be in a poor mood, you know, and you're going to either be wanting to get out of there quicker or, if it's in a nicer environment like this, you're not going to...you're going to relax about things..."*

(NFF father p. 13)

### **Baby wellbeing**

The impact of baby wellbeing on coping stood out and every parent spoke to this as being important in predicting their own emotional wellbeing. Although, as one parent highlighted, no NICU baby is a 'well' baby, the more progress the parents perceived their infants to be making, the better they felt emotionally. Although in this qualitative study it is not possible to make statements about moderating or mediating relationships between factors, it is probable that baby wellbeing moderates parental stress and anxiety throughout the NICU journey. This recurred as a robust theme and was the aspect that parents most often referred to when estimating their Subjective Units of Distress (SUDs) over the last week.

*"...this operation he had not long ago...yeah that was a bad time...once we knew it was done and it was being dealt with...you start to relax again."*

(NFF mother p. 6)

### **Other People**

The presence of strangers is one of the key differences between NICU & a home environment. This theme and its sub-themes reinforce the point that relationships with other people within the NICU environment are a key determinant of parental coping. Parents described the difficulties inherent in group situations; that one will get on well with some people, not well with others and everyone will live according to slightly different rules.

#### **i) In the same boat**

When talking about other parents most participants spoke positively and reported relationships which helped to normalise their own experience and promoted coping.

*"It makes you realise...you're not on your own, everybody else is dealing with it as well....Sometimes you just give each other a bit of strength when you need it...and someone will say something nice...and it makes you go 'oh yeah, actually I am doing ok...I am getting there.'"*

(NFF mother p.15)

*“...it’s quite nice speaking to the other parents...you know ‘cos we’re all in the same boat really.”*

(NFI mother p. 4)

## **ii) A matter of choice**

Several parents, however, also alluded to the fact that other parents and staff could add to the stress of the experience and that not having choice was related to increased stress.

*“You have to deal with people you wouldn’t normally socialise with...like Big Brother...you can’t just think ‘oh, I won’t come back’ because you want to see your baby...that was the hardest, having to bite your tongue.”*

(NFC mother p. 2)

*“...it was nice being in with other parents, but then I think that’s just the luck of the draw because there would be times with some parents perhaps if the dynamics didn’t work then you would not want that day in, day out.”*

(NFG mother p. 5)

## **iii) Talking helps...but not too much**

Some parents also talked about the value of normal conversations with staff that helped them to get through the days and retain a sense of connection to the world outside NICU.

*“...sometimes its chatting to the nurses as well...they’re fantastic...you can have a normal conversation and...it doesn’t have to be about your baby...it can be a chit chat about anything...”*

(NFF mother p.15)

While conversations with staff and other parents were primarily positively perceived, most parents talked in negative terms about visitors to the unit. These additional people and their conversations contributed to a sense of noise and busy-ness which, without exception, parents experienced as stressful. There was resentment that other parents did not appear to show consideration when hosting more visitors than were allowed and otherwise flouting the rules.

*“...the whole family comes in...but it’s just too many people and I found that a bit too much...also, there’s children as well, that’s not...I find them running around a bit, you know, I just think they could just run and then they could just bump into the...into the, you know... I mean babies don’t need all that noise going on.”*

(NFI mother p. 5)

*“But a lot of the time there’s just people there...for hours on end...who may be just providing lifts and...you feel you’ve got nowhere to just escape from...to just have a little bit of quiet down time.”*

(NFG father p. 5)

#### **iv) Feeling involved**

Several parents talked about feeling included in their baby’s care and how valuable this was to them. All but one of the mothers interviewed said that they had wanted information at times but been reluctant to ask questions or say something to staff because they worried about being a bother, seeming over-anxious or interfering. Factors which seemed to help with this included familiarity with the staff member and their physical availability.

*“[I will] often ring up and ask how they are and...nothing [is] ever too much trouble...and they always use the babies’ names as well, and it all just helps...”*

(NFG mother p.4)

*“...whenever you come in in the morning they [the staff] update you, you know, its “well this is what’s happened overnight...” and...you always feel involved in what’s going on.”*

(NFG mother p.3)

Parents also shared examples of times when they felt excluded or not given information and these created more stress for them. This led to some feeling confused about what to do for the best for their baby.

*“...if one nurse...hasn’t told you when you get your baby out for a cuddle to make sure you keep it under a blanket...then the next nurse comes on...and then you feel a bit bad because they’ve suddenly said to you ‘well why haven’t you got a blanket on him?’ and it’s like ‘well no-one told me!’”*

(NFF mother p.14)

#### **v) Flexibility**

Most parents spoke positively about how nursing staff seemed to consider parental needs and try to meet these wherever they could.

*“...as soon as they can let you do anything with the baby they do, even if you can imagine it probably makes their life more difficult and their job more time consuming, as soon as they*

*possibly can let you take as much ownership as possible, they do and...and that makes such a difference.”*

(NFG mother p. 3)

Although these were the main themes, as might be expected there were more idiosyncratic elements mentioned by some participants. Two of these stood out as worthy of mention;

#### **i) Fathers' experience of NICU**

The fathers interviewed did not perceive their experience as being qualitatively different to that of their partner; however with only two fathers in the sample there was not sufficient data to elicit themes around fathering in the NICU. Other authors have explored further the experience of fathers in the NICU (e.g. Hollywood & Hollywood, 2011) and have shown that NICU fathers face unique challenges, for example balancing the demands of work with being present in the NICU (Arockiasamy, Holsti, & Albersheim, 2008). The quote below offers an insight into one father's view of coping with the emotional experience of NICU as a man:

*“...we had a new [father] come in...when he first come in he was very distraught and I thought to myself ‘that’s right, just leave your manhood at the door’, you know, because that’s what this place is for, this is where men become real men and, you know, you can...in...the smallest way express how you’re actually feeling sort of thing...I gave him the bit of advice of ‘if you need something, ask for it’, you know, because he...he just sat there initially, his baby’s crying, his missus is upstairs...just been born it’s a whole emotional experience and when I caught him in the day room I said ‘look, if you need anything, if you’re too scared to ask just tell me and I’ll go...’*

(NFH father p.9)

#### **ii) Pre-natal expectations**

Expectation was only mentioned by two participants, however, when analysing the findings the researcher noticed the contrast between the experience of these two parents and the other participants. The two were a couple with twins. They had expected their babies to be early and had been prepared for NICU admissions, viewing this as the ‘best case scenario’ throughout the pregnancy.

*"I've thought all the way through that that's sort of been an advantage that we've had above other parents who weren't expecting to have a premature baby at all...I think that helped initially because...psychologically we'd already prepared ourselves for this so I think that perhaps that made it less stressful for us generally."*

(NFG mother p. 1)

## **Discussion**

The themes developed from the interview data suggest that the optimal conditions for coping appear to be having a relatively well baby, in a calm environment, shared with parents who hold similar values to your own, staffed by flexible, friendly professionals who seek to promote parental involvement in care at every possible opportunity. If each of these elements is in place then parents feel better equipped to deal with the emotional rollercoaster of NICU. If any of these is missing or worse, replaced by its opposite (e.g. other parents with whom you have nothing in common, nurses who are inflexible and exclusive of parents), then parents find it harder to cope with the experience.

This is the first study to place significant emphasis on relationships with other parents and, as such, opens the door to further research in this area. A number of previous studies have evaluated parent-led or peer support interventions (e.g. Bracht, O'Leary, Lee, & O'Brien, 2013) which engage 'veteran' parents in the delivery of telephone or face to face support. Some initial support for parent-parent support groups has been shown by older studies (e.g. Dammers & Harpin, 1982), however methodological problems with such studies and the absence of more recent research encourages caution in this area.

With the exception of the above, the current findings do not deviate significantly from previous research in this area. In the most recent comprehensive review on the topic of parenting in the NICU, Cleveland (2008) identified a number of parental needs in relation to NICU and four categories of staff behaviour which helped these needs to be met. The present findings map closely onto the staff behaviours identified (emotional support, parent empowerment, a welcoming environment and parent education), reinforcing the importance of these aspects of care. A number of previous studies have identified the importance of promoting parental involvement in care (e.g. van der Pal, Alpay, van Steenbrugge, & Detmar, 2013) and Family Centred Care interventions such as Creating Opportunities for Parent Empowerment (COPE - Melnyk et al., 2006) have been developed to meet this need. Brett, Staniszewska, Newburn, Jones & Taylor's (2011) review of such interventions in the UK provides an excellent overview of this area.

These data were gathered from a small sample of parents recruited from a single site and it is difficult to know how representative their views may be of the wider population of

NICU parents. Some parents may also have chosen not to be interviewed because of strong negative views about the unit and this may mean that the sample was biased towards those with positive experiences. Given that all babies were still resident in NICU at the time of the interviews it may have been difficult for parents to be critical of any aspect of their experience and so again the interviews may have elicited comments with a positive bias.

This study represents an important step forward in our understanding of the experience of NICU parents, despite the limitations outlined above. Previous research has largely been conducted by nurses and other NICU professionals in non-UK NICUs. This is one of the few studies to be carried out in the UK and the first to be conducted by a psychologist in clinical training. The fact that the researcher was not a member of NICU staff may have helped parents to present a more honest perspective than they would have to a member of NICU staff involved in the care of their baby. The fact that parents were interviewed while their babies were resident in NICU means that their feedback was informed by current experience rather than retrospective recall.

NICU nurses are in the unique position of being asked to carry out a traditional nursing role while also implicitly helping parents to manage the emotional and practical consequences of having a baby in NICU. This powerful position has been shown to influence parents' ability to cope with stressors and to begin to parent effectively (L. Jones, Woodhouse, & Rowe, 2007). This appears to be both a privilege and a burden, termed by one team of researchers as 'walking the line between the possible and the ideal' (Hall, Kronborg, Aagaard, & Ammentorp, 2010p. 2). It is important that discussion of this relationship is able to take place without it being perceived as placing an additional pressure on staff. While this research did not place paramount importance on the nurse-parent relationship, particular characteristics of the relationship were key to coping. Other authors (e.g. Reis, Rempel, Scott, Brady-Fryer, & Van Aerde, 2010) have described this relationship in more detail and have identified key nursing behaviours of perceptive engagement, cautious guidance and subtle presence as characterising the ideal position. One element of the relationship which parents appreciated was incidental contact with staff; 'normal' conversations about everyday things which helped them enormously to cope and retain a sense of connection to the outside world. This speaks to the importance of 'chatting' as an important clinical tool, originally identified by Fenwick, Barclay & Schmied (2001).

Further research is required around the transition from NICU to home. Although not the subject of the present research, it was mentioned by parents as a source of anxiety. Developing a clearer understanding of the specific stressors around transition will help parents and professionals to negotiate this successfully. Further exploration of peer relationships within NICU is also warranted. Evaluation of 'buddy' systems and parent support groups will further understanding of the contribution such interventions offer in reducing parental stress.

## Conclusion

These findings suggest that a calm, relaxing, appropriately lit environment probably makes the NICU experience less stressful for parents, however these elements are not sufficient on their own; the culture of the NICU needs to develop to mirror the new environment. Parents reported that majority of NICU staff already embody the value of compassionate care. There are times, however, when it is difficult for staff to be compassionate. Compassionate care is not resource-free and health care staff need to feel well supported themselves in order to be able to support and care for others adequately.

## Key recommendations to the service

**A comprehensive list of recommendations is included at Appendix iii, however one key recommendation from this project is for training and staff development. Quotes obtained from the parent interviews could be used to highlight existing good practice and training and coaching could support the staff team to develop these practices further.**

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**Title:** **An exploration of the construct of bitterness**

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## **An exploration of the construct of bitterness**

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## **Abstract**

*Objectives:* Bitterness has been suggested to be a common psychological reaction to persistent adversity; however it has thus far been understudied. The objectives of the current study were therefore to: i) Develop a reliable and valid English language measure of bitterness, ii) Pilot this new measure within a clinical population, iii) Explore how the construct of bitterness relates to treatment outcome in psychological therapy, and iv) Determine whether bitterness accurately predicts suicidal ideation in clinical populations. *Design:* a cross sectional questionnaire design was used. *Method:* A new bitterness measure was developed incorporating ideas from existing literature and suggestions from experienced clinicians. This measure was completed by a non clinical group ( $n = 313$ ) and factor analysis was carried out on these data. The measure was then completed by a group of secondary care mental health service users ( $n = 31$ ) and compared with the non clinical sample,. Additional symptom focussed measures were also completed by the clinical group. *Results:* Factor analysis showed that the bitterness measure was comprised of four subscales (labelled here as “experience of a negative event”, “nihilism”, “unfairness” and “negative interpersonal experiences”). Good internal consistency and acceptable test-retest reliability was found. Bitterness was found to be related to rumination, in particular the brooding / analytical subtype of rumination. A significant relationship was found with some measures of anger, but no significant relationship was found between bitterness and depression. *Conclusions:* Bitterness may be a unique construct, conceptually distinct from anger and depression and closely associated with analytical rumination.

## **Practitioner Points:**

- A new English language measure of bitterness has been developed
- This measure can be used in clinical practice to assess bitter thoughts and feelings
- Bitterness is closely associated with rumination, in particular the brooding /analytical subtype of rumination
- Bitterness has been shown to be conceptually distinct from depression

**Keywords:** *bitterness, measure development, rumination*

## **Introduction**

The concept of bitterness was first introduced to the academic literature by Linden (2003). Through clinical practice he identified a group of individuals who continued to be affected by negative life events far beyond what might be considered a 'normal' response timeframe. Once six months had passed since the relevant event it was not possible to classify the individuals as suffering from an adjustment disorder but Linden felt there was clear evidence of psychopathology. He sought to create a new sub-classification within the adjustment disorders which accurately represented their distress and encouraged research into possible treatments. He termed this idea 'Posttraumatic Embitterment Disorder' (PTED) and suggested that the core criteria necessary to this diagnosis included experiencing a single negative life event, experiencing that event as unjust, responding with embitterment and emotional arousal when reminded of the event and not having experienced any other mental disorder in the year prior to the event (Linden, 2003). Linden conceptualised bitterness (or 'embitterment') as a complex emotion and described it as "...[a] feeling of having been let down, of injustice and helplessness together with the urge to fight back and the inability to identify a proper goal." (Linden, Baumann, Rotter, & Schippan, 2007 p. 160). He suggested that an embittered response is one of many possible psychological reactions to an "exceptional, though normal negative life event such as unemployment [or] divorce" (Linden, Baumann, Lieberei, & Rotter, 2009 p. 140). Such a response does not follow inevitably from any particular type of event, more it is thought to emerge as a result of the interaction between an individual's basic beliefs and values on the one hand and, on the other hand, the perceived violation of these beliefs and values by the occurrence of the adverse event. Linden's suggestions make sense from a cognitive perspective on emotion (Ellis, 1962 as cited in Davey, 2008). If, as suggested by Ellis and later supported by Beck (1976), the manifestation of psychopathology is the result of maladaptive thoughts and beliefs and information processing biases then it is plausible that a bitterness response may develop as a result of the interaction between an event and the individual's interpretation of that event.

Linden suggests that bitterness is a mood state which is conceptually distinct from other negative emotions such as anger. Initially it may seem that there is little to choose between anger and bitterness but Linden proposes that, while anger may also be present in embittered individuals, it is not the primary emotion (Linden, 2003). Although both emotions occur in response to events which are perceived as unjust, Znoj (2011) suggests that the difference lies in the existence of optimism about change. In his circumplex model of embitterment he posits that bitterness is distinct from anger because bitter individuals feel hopeless about the possibility of change in their circumstances in the future. A bitter individual's energy is concentrated on achieving revenge on others rather than changing his or her own situation. Conversely, angry

individuals feel hopeful about change and their anger is directed towards achieving this change. Znoj goes on to discuss depression and to suggest that, although to many observers, bitterness may seem indistinct from depression, it is an individual's locus of control which distinguishes the two. Although both depressed and embittered individuals feel hopeless about change, the depressed individual will more commonly blame themselves for their situation whereas the embittered person will attribute blame to others. Linden et al. (2007) also address the perceived difference between embitterment and depression by suggesting that modulation of affect is unimpaired in bitter individuals compared to often restricted affect in those suffering depression. Although negative externalising emotions which are common to depression (such as helplessness and hopelessness) may feature prominently in individuals displaying bitter feelings, embitterment has additional features relating to feelings of injustice and it runs a "nagging and self-reinforcing" course (Linden & Maercker, 2010p. 1).

Of course the majority of people will experience events in their life which they feel are unfair and outwith their control, however not everyone who experiences such an event becomes bitter and harbours thoughts of revenge. Linden suggests that a number of factors predict an embittered response to such events, not least of which is an individual's pre-morbid personality. He believes that those most prone to developing bitter feelings are "...achievement oriented, devoted persons with strict convictions and beliefs, that show great self sacrifice and commitment in their job or social role." (Linden et al., 2007). From a cognitive perspective these traits also point towards schema level beliefs which may predispose an individual to an embitterment response. Indeed Dodek & Barnow (2011) go on to discuss this and suggest that dysfunctional schema involving viewing others or the world as dangerous and the self as powerless and vulnerable may be relevant to the development of bitterness. Such beliefs may lead individuals to be highly sensitive to slights or injustices which may in turn increase the likelihood of maladaptive emotional reactions when a negative event occurs. It appears from the existing literature that individuals with higher trait anger are more prone to developing a bitterness response and Linden makes a link with neurotic personality traits suggesting they also confer an increased risk of developing embitterment reactions. Conner & Weisman (2011) discuss preliminary findings which suggest that bitterness may be linked to suicidality. They infer this from analysis of proxy measures of bitterness such as the Hostility subscale of the Buss-Perry Aggression Questionnaire so it is a suggestion which merits further exploration.

Little empirical investigation has been carried out to explore the role that bitterness might play in engagement in psychological therapy. Given the suggestion that embittered individuals are highly sensitive to interpersonal slights and preoccupied with thoughts of vengeance (Linden & Maercker, 2010), it might prove difficult to engage them in therapy. In

one of the few published case studies which touches on this topic Newman (2011) suggests that clients who maintain longstanding angry and bitter feelings are likely to exit therapy early or struggle to achieve positive outcomes because "...they reason that they have the right to refuse any situation or experience that would add to their subjective sense of burden, including the challenging work of CBT" (p. 350).

Znoj (2011) suggests that there is a small chance of finding individuals with high levels of bitterness in the general population, however the chance of finding elevated scores in specific groups (e.g. prisoners, people out of work) is much higher. He cites studies of patients undergoing renal dialysis, people out of work and people who had experienced multiple life events as all finding elevated levels of bitterness in the groups under study when compared to matched controls.

There is little empirical evidence thus far to support the existence of bitterness as a valid construct. Linden suggests it is a mood state or complex emotion that, when experienced on a prolonged basis, may lead to psychopathology and the development of disorder. It is also possible that bitterness may have a close relationship with the cognitive process of rumination or it may be that bitterness itself is a cognitive process involving resentful thinking negative events and interpersonal slights. There is no published material from outside Linden's own research group in and most of this material focusses on justifying the argument for Post Traumatic Embitterment Disorder rather than developing a case for the clinical utility of considering bitterness. However, the three previous studies that do exist in this area (Linden, 2003; Linden et al., 2007; Linden, Baumann, Rotter, & Schippan, 2008) provide promising findings which merit further study regarding the existence of bitterness in the general population as well as an adult mental health sample. The exploratory nature of this study therefore builds on the emerging literature in this field. The development of an English language measure of the construct seems a logical next step as well as further investigating suggestions that bitterness is a complex emotion - distinct from anger and depression - and that the presence of bitter thoughts and feelings may impact on treatment outcome.

### **Study aims and hypotheses**

**Aims** i) To develop a reliable and valid English language measure of bitterness, ii) To pilot this new measure within a clinical population, iii) To explore how the construct of bitterness relates to treatment outcome in psychological therapy, and iv) To determine whether bitterness accurately predicts suicidal ideation in clinical populations.

### **Hypotheses:**

- i) Scores on a measure of bitterness will be higher in a clinical group than a non-clinical control group
- ii) A higher bitterness score pre-treatment will explain a significant proportion of the variance in treatment outcome (as measured by the SCL-90-R and BDI-II) in psychological therapy
- iii) Higher bitterness scores will correlate with greater endorsement of items related to suicidal ideation and hopelessness on the SCL-90-R and BDI-II
- iv) Higher bitterness scores will be predictive of higher scores on the RRS

### **Analysis Plan**

IBM SPSS Statistics version 19 will be used for all statistical analyses. Factor analysis will be used to explore the factors structure of the bitterness scale. A t test will be used to address hypothesis I, regression analysis will be used to address hypotheses ii & iv. Pearson's correlations will be used to examine hypothesis iii.

### **Methodology**

#### **Participants**

Clinical participants were males and females over the age of 18 who self identified as currently experiencing mental health difficulties. They were recruited through secondary mental health care services and via mental health related websites. These populations were chosen so as to be able to explore the relationship between bitterness and other mental health difficulties. Inclusion criteria were broad in order to maximise recruitment so participants were only excluded from the study if they had a primary diagnosis of Post Traumatic Stress Disorder (PTSD). This was because it is suggested that individuals diagnosed with PTSD will demonstrate elevated levels of bitter feelings compared to other clinical groups (Linden, Baumann, Lieberei, Lorenz, & Rotter, 2011). Non clinical participants were males and females over the age of 18 recruited through social media sites.

#### **Measures**

A measure of bitterness was developed as part of this project as no English language measure currently exists. Other measures completed by the clinical group were: **Symptom Checklist-90-Revised (SCL-90-R)** (Derogatis, 1977) a 90 item self-report scale covering 9 symptom domains. This scale has been used in previous research on embitterment. The **Ruminative Response Scale (RRS)** (Nolen-Hoeksema & Morrow, 1991), a self-report scale designed to measure an individual's ruminative responses to negative emotions. Given that the



literature has yet to demonstrate a clear distinction between anger and bitterness the **State-Trait Anger Expression Inventory – 2 (STAXI-2)** (Spielberger, 1999) was also used with the aim of demonstrating the independence of the two constructs from each other. Although it is proposed that bitterness is separate from depression this has yet to be demonstrated empirically hence the final measure was the **Beck Depression Inventory – II** (Beck, Steer, & Brown, 1996).

## **Procedure**

The existing literature on the topic was thoroughly searched to identify existing scales and measures which purported to measure bitterness. Measures of constructs to which bitterness is hypothesised to be related were also identified and well-validated examples of these selected for use.

When devising the bitterness measure an initial pool of potential items was generated. These were created using concepts from the existing literature as well as ideas and suggestions from clinicians and service users. This pool of items was reviewed by two experienced clinicians and a group of clinical psychology trainees. This generated an initial pool of 28 items which were arranged into a first draft of the new bitterness measure. Items were organised into two groups; the first asking about the responses to a specific event (e.g. “I experienced an event which I still see as very unjust or unfair”) and the second asking participants to endorse how much an item described them as a person (e.g. “I feel I have got a raw deal out of life”). This initial measure was piloted in a general population sample ( $n=37$ ) in order to test item structure and gather feedback regarding ease of completion. In response to this pilot process one item was split into two and no items were removed, resulting in 29 items in the second draft of the measure. The order of the two groups of items was also reversed at this point as pilot participants had given feedback that focussing on negative events in the first section may have negatively skewed their responses to the second group of items.

This 29 item measure was then administered to a larger general population sample ( $n=313$ ) in order to gather sufficient data to conduct a robust analysis of the factor structure of the measure. All of these participants were asked if they would be happy to complete the measure again one week later in order to evaluate test-retest reliability. This resulted in a smaller group ( $n=64$ ) who completed the measure a second time.

The bitterness measure was completed by the clinical group ( $n = 31$ ) along with the additional clinical measures. All participants recruited more than three months before the end of the study were asked if they would be happy to complete the measures again a second time at the end of psychological therapy. Only three participants consented to do this so no statistical analyses were conducted on these data.

## Results

### Descriptive statistics

A total of 352 general population participants completed the bitterness questionnaire. Thirty nine of these were excluded due to missing data resulting in a non-clinical group of  $n = 313$ . Twenty eight participants in this group declared a current mental health difficulty (8.9% of the group), all of these people described their difficulty as either low mood or anxiety. Thirty three mental health service users were recruited to the clinical group. Missing data were treated as per the manual for the STAXI-2 (Spielberger, 1999) and the SCL-90-R (Derogatis, 1977), however two sets of data were excluded due to substantial amounts of missing data. This resulted in a clinical group of  $n = 31$ . The majority of these described their primary mental health difficulty as depression or anxiety (depression  $n = 13$ , anxiety disorder  $n = 13$ ) with the remainder declaring primary borderline personality disorder ( $n = 3$ ), dissociative disorder ( $n = 1$ ) and bipolar disorder ( $n = 1$ ). Demographic characteristics of each group are summarised in Table 1 below.

**Table 1: Demographic details for non clinical and clinical groups**

	Non clinical group <i>n</i> (%)	Clinical group <i>n</i> (%)
<b>Gender</b>		
Female	210 (67.1)	24 (77.4)
Male	103 (32.9)	7 (22.6)
<b>Age</b>		
18 – 24 years	16 (5.1)	7 (22.6)
25 – 34 years	167 (53.4)	5 (16.1)
35 – 44 years	77 (24.6)	9 (29)
45 – 54 years	26 (8.3)	2 (6.5)
55 – 64 years	24 (7.7)	6 (19.4)
65 – 74 years	2 (0.6)	2 (6.5)
75 years +	1 (0.3)	-
<b>Highest education</b>		
Did not attend education	3 (1)	-
Left school with no qualifications	1 (0.3)	2 (6.5)
GCSE / equivalent	29 (9.3)	5 (16.1)
A Level / equivalent	61 (19.5)	11 (35.5)
Undergraduate degree	89 (28.4)	6 (19.4)
Postgraduate degree	130 (41.5)	7 (22.6)
<b>Relationship status</b>		
Single	49 (15.7)	10 (32.3)
In a relationship	38 (12.1)	4 (12.9)
Living with partner	71 (22.7)	4 (12.9)
Married / civil partnership	142 (45.4)	10 (32.3)
Separated / divorced	12 (3.8)	3 (9.7)
Widowed	1 (0.3)	-

A Chi square test was used to examine gender differences between groups. No significant difference between the clinical and non clinical groups was found in terms of gender,  $\chi^2 = (1, N = 344) = 1.38, p = .24$ . Due to small sample sizes Fisher's exact test was used to examine additional between group differences. No significant difference was found between the clinical and non clinical groups with regard to relationship status ( $p = .082$ ), however the clinical group was significantly older than the non clinical group ( $p < .001$ ) and the non clinical group had achieved a significantly higher level of education ( $p = .006$ ).

#### *Psychometric properties of the bitterness scale*

A principal component factor analysis was conducted on the original 29 items with varimax rotation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis,  $KMO = .92$ . An initial analysis was run to obtain eigenvalues for each factor in the data. Six factors had eigenvalues over Kaiser's criteria of 1 and in combination explained 61.48% of the variance in scores. The scree plot (see Appendix iv) was ambiguous and showed inflections that would justify retaining four or six factors. Four factors were retained because of the relatively large sample size, a desire to be conservative in factor retention and the fact that the final two factors only explained an additional 7% of the variance. Table 3 shows the factor loadings after rotation. The item clustering suggests that factor 1 represents experience of a negative event, factor 2 represents a sense of nihilism, factor 3 unfairness and factor 4 reflected negative interpersonal experiences. As can be seen from Appendix 3, two items ("I feel I have got a raw deal out of life" and "Other people always seem to have better luck than me") were found to load almost equally onto factors 2 and 3. Although the item loadings were slightly lower, these two items appeared to fit better with factor 3 so were included in this factor for conceptual rather than statistical reasons. The three items which did not load heavily onto any factor ("I experienced an event which for which I blame myself", "I feel pleased if I see or hear about the misfortune of others more successful than me" and "Other people never put in as much effort as I do") were discarded from the measure at this point, resulting in a final 26 item measure with four subscales. These three items were not included in any subsequent analysis.

**Table 2: Item loadings on each factor (values under 0.4 suppressed)**

<b>Rotated Component Matrix<sup>a</sup></b>						
	Component					
	1	2	3	4	5	6
I experienced an event which causes me to be extremely upset when I am reminded of it	<b>.770</b>					
I experienced an event which I felt powerless to do anything about	<b>.761</b>					
I experienced an event which I continue to think about over & over again	<b>.740</b>					
I experienced an event I still see as very unjust or unfair	<b>.729</b>					
I experienced an event which has affected my psychological wellbeing	<b>.698</b>					
I experienced an event which it is important not to forget	<b>.641</b>					
I experienced an event which hurt my feelings	<b>.633</b>					
I experienced an event which made me withdraw from friends and social activities	<b>.520</b>					
I experienced an event which has affected my physical wellbeing	<b>.501</b>					
I wonder why I bother to keep going		<b>.742</b>				
I feel pessimistic about my future		<b>.713</b>				
I have given up thinking that working hard is rewarded		<b>.701</b>				

In the end my efforts are never really appreciated	<b>.646</b>				
I experienced an event which led me to think there is no point in trying anymore	<b>.630</b>				
I feel I have got a raw deal out of life	.602	<b>.549</b>			
I feel frustrated that I can't do anything to change my current situation	<b>.598</b>				
Other people always seem to have better luck than me	.546	<b>.508</b>			
Other people always pick up on my mistakes	<b>.491</b>				
When people are especially nice, I wonder what they want	<b>.479</b>				
I haven't had the advantages that others have had in life		<b>.722</b>			
There is a lot that I have been prevented from achieving in life	.411	<b>.669</b>			
Nobody else really understands what I've been through		<b>.492</b>			
I experienced an event which triggers me to harbour thoughts of revenge			<b>.727</b>		
I experienced an event which makes me feel happy when I think of the person responsible experiencing something similar			<b>.657</b>		

I experienced an event which caused me considerable resentment				<b>.610</b>		
I experienced an event which for which I blame myself						
I experienced an event which caused me to feel disrespected				<b>.533</b>		
I feel pleased if I see or hear about the misfortune of others more successful than me						.738
Other people never put in as much effort as I do						.642

The bitterness scale was found to have high overall reliability (internal consistency) at Cronbach's  $\alpha = .92$ . The negative event subscale ( $\alpha = .89$ ), nihilism subscale ( $\alpha = .86$ ), unfairness subscale ( $\alpha = .82$ ) and the negative interpersonal experiences subscale ( $\alpha = .76$ ) all showed high reliability.

Data were gathered at a second time point approximately one week after the first completion of the measure from a sub group of the non clinical participants ( $n = 64$ ) in order to assess test-retest reliability. Intraclass correlation coefficients (ICC) were calculated for each item using this data. The ICC for individual items ranged from .22 ("There is a lot I have been prevented from achieving in life") to .74 ("I wonder why I bother to keep going"). All of these coefficients were significant with the exception of the lowest (.22). All ICCs and respective confidence intervals are detailed in Appendix 5.

#### *Bitterness scores between groups*

The total possible score on the newly developed bitterness measure was 182. Clinical participants received a mean score of 92.35 ( $SD = 29.42$ ), while non clinical participants received a mean score of 47.15 ( $SD = 26.56$ ). This difference was significant at  $t(342) = 8.95$   $p < .001$ , with a moderate-large effect size ( $r = .44$ ) therefore the first hypothesis was supported.

Secondary analysis was conducted using a 2 (group) x 4 (subscale) repeated measures ANOVA to examine if these differences were consistent across subscales. This showed a main

effect of subscale ( $F(2.45, 88.50) = 81.76, p < 0.001$ ) was modified by the interaction between group and subscale,  $F(2.45, 3.93) = 3.63, p = 0.019$ .

#### *Relationship between bitterness and suicidality*

Correlations between the total bitterness score for the clinical group and items relating to suicidality and hopelessness were examined. Total bitterness score was found to be significantly correlated with items relating to suicidal ideation on the BDI-II ( $r(29) = 0.45, p = .011$ ), suicidality on the SCL-90-R ( $r(29) = 0.58, p < .001$ ) and hopelessness on the SCL-90-R ( $r(29) = 0.40, p = .026$ ). No significant correlation was found between bitterness score and endorsement of the item related to pessimism on the BDI-II ( $r(29) = 0.34, p = .06$ ). These findings support hypothesis two with regard to the relationship between bitterness and suicidality and bitterness and hopelessness.

#### *Relationship between bitterness and rumination*

Consistent with hypothesis four, bitterness scores were strongly predictive of total score on the RRS,  $\beta = .66, t(29) = 4.71, p < .001$ . Stepwise regression showed that total bitterness score and score on the depression subscale of the SCL-90-R comprised the best fit predictor model of total RRS score,  $R^2 = .63, F(1,28) = 23.92, p < .001$ .

Total RRS score also explained a significant proportion of the variance in total bitterness scores,  $R^2 = .43, F(1,29) = 22.16, p < .001$ . Because of this relationship further unplanned analyses were conducted using the subscales of the RRS. These showed that a stronger relationship was found between the brooding subscale and total bitterness score with brooding score explaining more than half the variance in bitterness score,  $R^2 = .54, F(1,29) = 34.60, p < .001$ .

#### *Relationship between bitterness and anger / hostility*

No hypotheses were stated *a priori* about the relationship between bitterness and anger, however the literature suggests that they are related yet distinct concepts. Significant correlations were found between total bitterness score and state anger ( $r(29) = .62, p < .001$ ), trait anger ( $r(29) = .46, p = .009$ ) and the Anger Expression-In subscale ( $r(29) = .59, p < .001$ ). An association was also found between bitterness and the Hostility sub scale of SCL-90 ( $r = 0.57, p = 0.01$ ).

## **Discussion**

The aim of the current study was to examine the construct of bitterness within the general population and a mixed clinical group. In order to do this, a measure of bitterness was

developed (BBQ; Bath Bitterness Questionnaire). Factor analysis suggested a four factor solution to the data gathered for the first draft of the questionnaire and the measure showed high internal consistency. A moderate effect size was found when comparing scores on the bitterness measure between the healthy and clinical groups. Regression analyses showed that ruminative brooding (as measured by score on the brooding subscale of the RRS) was the best predictor of bitterness.

These results were found in a small clinical sample and the statistical analyses may not have been sufficiently powered to detect relevant effects. Further hypotheses could have been stated regarding the relationship between bitterness and anger/hostility which would have allowed the analysis to be planned rather than post hoc. Full diagnostic interviewing was not carried out and all measures used relied on self report. It may be that – as a complex emotion - bitterness fluctuates and is therefore difficult to measure reliably, however test-retest values for the measure were acceptable. Additional factors which may have influenced scores on the bitterness measure (e.g. history of trauma) were not assessed, however the clinical sample appear to be reasonably representative of a secondary care population in terms of severity and complexity of symptoms. There may have been some similarities between the clinical group and the participants in the non clinical group who declared current mental health difficulties. While including people with mental health problems in the non clinical group may have provided a more accurate estimate of mean bitterness levels across the general population, retention of these sets of data within the non clinical group may have adversely influenced the comparison between groups.

The use of the overall bitterness score (which may represent more general psychopathology), rather than subscale scores (such as unfairness and nihilism which may be more specific to bitterness) in the analyses may have influenced the findings adversely and further analysis of the subscale scores may be a useful future direction.

No previous research in the area has explored the relationship between bitterness and rumination and the findings of the current study suggest it seems useful to consider rumination as a plausible maintaining factor in embitterment. The significant relationship between bitterness and rumination merits further research and the current findings suggest that they are related yet not identical and that bitterness may be the emotion which ‘flavours’ rumination, rather than a process in itself.. Nolen-Hoeksema’s Response Styles Theory (1991) describes rumination as being the process of repetitively thinking about the causes, consequences and symptoms of one’s negative affect and research shows that individuals who are high ruminators are more likely to interpret events in their lives as stressful (Lok & Bishop, 1999). This evidence coupled with the suggestion that embitterment is a self-perpetuating emotional state (Linden & Maercker, 2010) makes rumination an ideal culprit for the continual reinforcement of



bitter feelings. Natural ruminators may also be at increased risk of developing bitter thoughts and feelings in response to difficult life events.

Linden et al. (2008) proposed that bitterness was distinct from anger and the present findings support this assertion. The range of bitterness scores within the clinical and non clinical groups supports the assertion that bitterness is a complex emotion that is experienced by most people to a greater or lesser degree, rather than a disorder which is either present or absent. Total bitterness scores were found to be significantly correlated with some subscales of the STAXI-2 indicating that bitterness and anger are indeed related yet conceptually distinct.

It is likely that there is some overlap between the constructs of bitterness and humiliation. Gilbert (1997) argued that humiliation arises from experiences where an individual has been in a powerless position and ridiculed or abused in some way, but that the person does not feel personally to blame for these actions of the other (e.g. torture is often described as a humiliating experience, not a shameful experience). The humiliated individual feels that they have been harmed unfairly and believes that others are to blame for damage to the self. Even though they may have been in a powerless position and were not able to fight back, they believe it is the other who is bad. The humiliated person often harbours beliefs about injustice and desires for revenge; bitter feelings and brooding rumination may play a role in maintaining humiliation. Further research is required to explore the similarities and differences between the two constructs.

Given the relationship between rumination and bitterness it is possible that therapeutic techniques which have proved useful in addressing general rumination may also prove helpful in reducing bitter ruminations (Watkins, 2010). Such techniques are representative of third wave CBT therapies; treatments like Mindfulness Based Cognitive Therapy, Behavioural Activation and Rumination-focussed Cognitive Behaviour Therapy. Traditional CBT has proved less effective for high ruminators so interventions which target the process rather than the content of thinking may be successful. Watkins (2010) recommends normalising rumination and suggesting that it is an understandable response to the situation, he proposes this can reduce secondary negative responses to rumination ("rumination about rumination" p.9). Therapists should expect rumination to get in the way of therapy and plan for this, encourage thoughts and behaviours that are action focussed, specific and rooted in experience. Ruminators tend to be passive, abstract and evaluative, focussed on analysing and intellectualising life events, with overgeneral memory and global thinking errors. Taking a functional analytic view and conceptualising bitter rumination as an escape and avoidance behaviour may help therapists to target this early in therapy, thereby reducing the likelihood of later difficulties.

Considering the existence of bitterness in specific populations may prove fruitful both in removing barriers to treatment and also in reducing risk. There may be some overlap with the concept of 'grievance thinking' which is discussed in the forensic literature in relation to

increased risk for sexual offending (Barnett, 2011). Further research into the existence of bitterness in specific groups is required, particularly in groups who experience events which may precipitate a bitter response (e.g. aggrieved fathers separated from their children, military veterans who feel they have been treated badly by the country they served).

One area for future research is the exploration of what happens to bitterness when other mental health difficulties remit. This study found that bitterness does exist in the general population, although it is found at significantly higher levels in a clinical sample. There could be many reasons for this and the design of the current study does not allow for exploration of these. Further work to explore the relationship between bitterness and negative life events, the temporal relationship between the development of bitterness and other mental health difficulties and mediating factors in this relationship would be valuable. Too few participants were recruited to the current study to allow bitterness scores to be examined across diagnostic groups but this would be an interesting area for further work.

In conclusion, the current findings support the view that bitterness may be a relatively stable emotional construct. Development of the BBQ suggests that bitterness may be measured by items relating to experience of negative events, feelings of unfairness, a nihilistic view of life and negative interpersonal experiences. Higher levels of bitterness are closely associated with brooding rumination and with both state and trait anger as well as an internalising approach to anger expression. Assessment of bitter thoughts and feelings at an early point in an individual's contact with mental health services may prove useful. Psychological therapy formulations which take account of these findings in individuals with high levels of bitterness may offer the most hopeful outcomes.

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## **Executive summary**

Previous published work has identified that bitterness may be a common psychological reaction to difficult events and experiences. The majority of the previous work in this area has been published from Germany, focussing on individuals who were negatively affected by the German reunification in the 1990's. Clinicians noticed a sub group of patients presenting with significant bitter feelings in relation to their life experience, yet no evidence of other mental health difficulties. These reports are clinically interesting and require further investigation.

This project set out to explore the idea of bitterness in a UK population. Four hypotheses were stated at the outset of the project: i) scores on the new bitterness measure would be higher in the group of mental health service users than in the general population, ii) a higher bitterness score at the beginning of psychological therapy would predict poorer therapy outcome, iii) a higher bitterness score would correlate with greater endorsement of items related to suicidal ideation and hopelessness, and iv) higher bitterness scores would predict higher scores on a rumination questionnaire.

Although German translations exist, no English language measure of bitterness has previously been developed. The first task of this project was therefore to develop a new measure of bitterness. This was done by taking ideas about bitterness from the existing literature and combining them with suggestions from mental health professionals. The first draft of the measure was completed by a small group of undergraduate students to check for ease of completion. This process resulted in one of the items being split into two, but no others being changed or removed. Once completed, this new measure was filled in by a reasonably large ( $n = 313$ ) general population sample. Data from this sample were used to analyse the factor structure of the measure. This analysis showed that the new measure was comprised of four subscales, labelled as i) "experience of a negative event", ii) "nihilism", iii) "unfairness", and iv) "negative interpersonal experiences". The overall measure and each subscale showed good reliability.

The measure was then administered to a smaller clinical sample ( $n = 31$ ) along with four other symptom-based questionnaires (Beck Depression Inventory-II, Ruminative Response Scale, Symptom Checklist-90-Revised and State-Trait Anger Expression Inventory-2). The scores on the bitterness measure for the two groups were compared. Statistical analysis showed that the average bitterness scores of the clinical group were significantly higher than those of the general population sample. Further analysis showed that bitterness scores in the mental health group were related to ruminative thinking and anger, but there was no significant relationship found with depression.

Very few participants could be recruited to the before and after therapy element of the project so the second hypothesis could not be investigated, however the other three hypotheses were supported by the study findings. Bitterness appears to be a relatively stable emotion and is related to a ruminative thinking style, as well as to anger. The new bitterness measure is able to

discriminate between bitterness and depression and supports the assertion that they are different from each other. This new knowledge may be helpful for clinicians in offering the most effective therapeutic interventions to mental health service users.

### **Connecting narrative**

In reviewing the pieces of work which comprises the portfolio I have noticed several themes running through the work. The first, which is apparent in Case Study 1, is an interest in the presence of anxiety disorders in individuals with quite complex difficulties. This case study detailed a piece of work I carried out with the aim of treating OCD in a man with a longstanding history of psychosis. The account details some of the difficulty in applying a standard treatment protocol within a complicated context. This theme recurs in Case Study 4 which again describes the treatment of OCD, this time in a young man with a comorbid diagnosis of a neuropsychiatric autoimmune condition. In conducting each piece of work I reflected on the medical management of the individual and how their difficulties were understood from a predominantly biological perspective, I felt that part of my value as a psychologist was to develop a formulation which took account of additional factors and to use this to help the client understand the development of their difficulties.

The broader theme of treating common mental health problems in complex contexts is also seen in Case Studies 2 and 4. In the first of these I describe working to engage a woman with a Learning Disability in adapted CBT for depression. She was very wary of services and reluctant to attend the team's clinical base so several of the sessions were conducted in a coffee shop. While this helped her to feel relaxed and developed our relationship, it was difficult to engage in any therapeutic work in such a public place. Her low mood was also complicated by food refusal but she would always have hot chocolate and marshmallows if we went to the coffee shop so this helped to achieve some improvement in an indirect way. There were also prominent grief-related issues for this woman and we were not able to discuss these directly. This combination of difficulties was not dissimilar to the presentation described in Case Study 4. This woman was low in mood and was also grieving for her husband. I found it difficult to manage our sessions as she seemed to enjoy having someone to talk to so agenda setting and focus was difficult. Working with this person helped me to become more confident in setting an agenda and seeing the benefit of doing this.

In the final case study (Case Study 5), I also struggled to keep focus to the sessions. This described therapy for military-related PTSD. The client had quite a ruminative style and would sometimes engage in ruminating out loud in session which was difficult to interrupt. I also found that he often told me the same facts or stories time and again. Listening to recordings

of these sessions was invaluable in helping me to recognise where I could be more assertive and how to begin to structure the session from the very beginning.

PTSD has been an interest for a long time and I was keen to gain experience of working with it clinically during training, as well as making it the focus of a piece of research work. This was how the topic for the Critical Literature Review was decided. I was keen to review an aspect of PTSD which had not previously been explored. I conducted a search for published reviews in the area and discussed this list with Paul Salkovskis in a research meeting. We briefly considered exploring PTSD in female veterans but ultimately decided that I would focus on the development and maintenance of PTSD in perpetrators of violence. I received research supervision on this piece of work from Josie Millar and we agreed that I would explore both military veteran and offender groups within the review. I carried out the search of the literature and then discussed with Josie the final pool of papers. Initially I wrote the review in a descriptive way and did not really consider the theoretical basis for PTSD in perpetrator groups. Josie and Paul both commented on a draft I had produced and, in response to this feedback, I took out chunks of detail about the studies which left much more space in the write up to discuss the applicability of theoretical models. This process has helped to hone my critical thinking skills and, specific to PTSD, to think carefully about the cognitive model and how each element may apply to a particular group. Although I have not worked clinically with someone with PTSD since completing this review, I hope this experience will mean that I can develop better individual formulations and effective interventions.

Difficult and traumatic experiences also formed the basis of the Service Improvement Project, exploring parents' experience of having a baby in NICU. This project was put forward as a SIP by the Field Supervisor, Mike Osborn. He was part of a research team evaluating the impact of a newly built NICU unit. One element of this project involved interviewing parents about their experience of the unit. I have looked throughout training for opportunities to work in perinatal mental health and related settings, so when I saw the project advertised I was keen to be involved. Mike and I met several times to discuss the background to the project and how to develop the interview to focus from a simple focus on the environment. I conducted a thorough search of the literature related to NICU and highlighted salient papers to Mike. I also found several measures which had been developed and standardised for use in NICU. We considered these during a joint meeting with Paul Salkovskis, the academic supervisor for the SIP, and discussed whether they would fit with the aims of the project or whether it would be better to consider them for use as an ongoing audit of parent experience. The decision was made to carry out the SIP as planned and then to use the measures to develop an audit tool at a later stage. At this meeting we also discussed the theoretical framework for the interviews and how to integrate both cognitive and attachment perspectives. We also agreed that the project did not require a separate ethics application through IRAS as it was already approved through the wider study. I

did not realise at this point that I did need to apply for ethical approval through the University of Bath Psychology Ethics Committee. Fortunately, through discussion with other trainees, I discovered this and was able to apply for approval in time without the delaying the project. I found this process to be fairly smooth. I obtained all of the IRAS documentation relating to the main study and submitted these to the Psychology Ethics Committee, along with the interview schedule, consent and information sheets. The committee reviewed the project quickly and I received approval within a week of the application being submitted.

Following this meeting I spent time in the NICU observing the environment and developing my understanding of the setting. I attended some meetings of the wider research team which helped to develop my understanding of the overall project and some of the technology being used. Mike and I discussed the structure of the interviews and he introduced me to Rebecca Abrey, the NICU Research Nurse, who was invaluable in helping with the conduct of the project. Rebecca introduced me to key NICU staff, including the Consultant Paediatrician and NICU Modern Matron. I talked briefly with these people about the scope of the project and any information they were keen to elicit.

Once the semi-structured interview schedule was agreed I arranged some days to spend in the NICU to carry out the interviews. This was an insight into the practice of conducting research in a clinical setting and the importance of flexibility! Rebecca would identify parents for me to interview each day but often they were unavailable due to their visiting times having changed or their baby having been discharged at short notice. This meant that I was not able to interview as many parents as we had hoped and had to contact some by telephone or visit them at home after discharge. This meant we were still able to gather their views, but not in the NICU environment which was thought to be a valuable aspect of the project.

Once the interviews had been conducted I set about transcribing them. I had very little previous experience of transcription but had been warned about the amount of time this would take. By this point we were back in teaching or placement full time so I didn't have chunks of time available to work on transcription. After trying different routines I found it worked well to try to transcribe for an hour each evening. It was a task I could pick up fairly easily and this regular time slot meant I felt like I was slowly working through it. I had an incredible sense of relief when I finally completed them!

Once the transcripts were complete I met with Mike and Paul again to discuss how to develop themes from the data and how to structure the write up. I had two further meetings with Mike and one with Paul to discuss the themes from the interviews and they each reviewed them separately. They felt the themes were rooted in the data so I did not change them significantly on the basis of their feedback, although did split one large unwieldy theme into several sub themes.

I wrote the draft of the paper and then submitted it to Paul for feedback. I also met with Mike to review it and discuss dissemination of the findings. Paul and I met later to review the paper and I made some changes to structure and style based on his feedback. I also reduced the words given to discussing the miscellaneous themes based on feedback from both Paul and Mike. I found this process slightly difficult as each supervisor has a different theoretical orientation and trying to balance their theoretical priorities within the paper was a challenge.

The issue of research supervision is also pertinent to my main project which explored the construct of bitterness. Having searched the literature, initially I developed the idea for the project in discussion with my clinical tutor, Claire Lomax, and academic supervisor, Paul Salkovskis. We agreed on an exploration of bitterness through developing a new measure and piloting this in normal and clinical samples. I approached a previous supervisor, Chris Gillmore, who agreed to act as field supervisor for the project. Paul and I met four times towards the end of my second year to further develop the idea. In between these meetings I searched the existing literature and developed the pool of items for the questionnaire. At this point I was also developing the application for IRAS approval. This was not a process I had been through before and I found it difficult to navigate. My academic supervisor was not available on email for brief queries so much of the writing of the application was carried out with advice from other trainees and a very helpful guide that one trainee had written. I had no idea how long the process would take and did not know to apply for Research & Development (R&D) approval from the relevant Trust at the same time. I was able to get the project approved through the Proportionate Review process which was relatively quick (a matter of a few weeks) and received really helpful advice from the Research Ethics Committee co-ordinator. They wanted some amendments made before approval so I made those and received full approval at the beginning of my third year. I then proceeded to apply to the University of Bath Psychology Ethics committee and the R&D Department of the local trust. The university ethical approval was achieved quickly but the R&D department took over two months to review my application and grant approval which delayed the start of recruitment. I had been visiting teams to discuss recruitment and conveyed the message from R&D that approval was imminent, however it continued to be put off and delayed. If I was to conduct this project again I would begin the ethical approval application process much sooner and would apply concurrently to IRAS and the relevant R&D department(s).

While I was waiting for approval I attended a team meeting with my field supervisor at what was supposed to be my primary recruitment site. Although he had briefed the team previously about the project, they were quite hostile towards it and critical of the word “bitterness” and the negative judgements they felt it implied. This was a difficult meeting and I felt quite disheartened afterwards. It did help me to think about how I described the project though and questions that might come up from other teams. I subsequently visited two other



Psychological Therapy teams and received much more positive feedback about the project and commitments to help with recruitment. I contacted two further teams, one team said they would be unable to help and another invited me to their monthly team meeting to discuss the project. Unfortunately, due a clash between teaching and their meeting I was unable to attend immediately.

I received R&D approval in November 2013 and contacted all the recruitment sites to let them know they could begin handing out the information sheets. Recruitment moved slowly though and – with the exception of my field supervisor and his trainee - the team at my primary recruitment site did not seem prepared to hand out the project information. I'm aware that all teams were also very busy and managing a number of competing priorities. I kept in regular touch with the psychologist point of contact for each team but found it quite hard to know how much to contact them and how much would be too demanding. One of the teams suggested I give them the questionnaire packs to keep in the team office (rather than the participant having to contact me, or me them, to get one). This meant that if a service user was interested then they could be given a pack immediately. This seemed really helpful in getting recruitment started at that site and they recruited by far the majority of participants to the project in this way (22 of the total of 33). I also set this system up at the primary recruitment site but it did not seem to work as effectively there. The third recruitment site only wanted to hand out information sheets.

I was able to go to the team meeting at the fourth site in January and they were happy to help which was great news! I also spoke to my academic supervisor at this point about my concerns around recruitment being slow and being worried that I would not recruit enough participants to conduct sufficiently powered analyses. We agreed that I would contact the REC and ask for an amendment to my ethical approval to allow me to recruit service users directly in the waiting rooms at mental health team bases by putting up posters and making packs available for them to take away and also to advertise on mental health websites. My supervisor told me I could request this amendment via Chair's Action however, on contacting the REC, they told me this was not possible and I would have to submit a substantial amendment request. I did this and received a response from the REC fairly quickly. I then had to wait for R&D approval which took some time. During this time I visited the Recovery team at my primary recruitment site to ask for their help with recruitment (in addition to the psychological therapies team). They seemed happy to help, although this willingness did not generate any participants.

Once R&D approval came through I immediately contacted mental health websites and asked them to advertise the research if they were able to. I paid one website to do this, another refused to advertise it due to the subject matter and the others I contacted did not reply to me. It turned out that website advertising was not very fruitful as it only generated one participant in total.

I contacted all the recruitment sites and one other team who had not previously been approached and asked them to put up posters in their waiting rooms. All agreed to do this. At the suggestion of one of the psychologists, I also spent several mornings in the waiting room of the South Gloucestershire team base handing out leaflets about the research and being available to answer service users' questions.

I had originally planned to end recruitment at the end of March but continued taking data until 2<sup>nd</sup> May in order to obtain as many participants as possible. Even at this point I had only been able to recruit half of the number I had originally aimed for in order to achieve adequate power (33 instead of 64).

On reflection, recruitment was much more difficult than I had anticipated it would be. Because I was recruiting a general secondary care sample I had thought it would be relatively straightforward to get participants. I think two things particularly contributed to the difficulty; the first was the recruitment time frame, I should have allowed much more time and ought to have responded more quickly to the slow start to recruitment. The second was unwillingness from individual psychologists to inform participants about the research. I appreciate that this was influenced to an extent by workload, however some people stated explicitly that they did not agree with the subject of the research so would not inform service users about it. I think this is the main reason why I only recruited one participant through my primary recruitment site.

My experience of research supervision has been up and down. For my main project both my field and academic supervisors have been very busy. My field supervisor has kept in touch by email but there have been periods of time when I have felt uncertain about how to proceed and the absence of regular research supervision has not helped with this. It has meant that I feel proud that I have completed the project independently but had led to some anxiety about the project being a bit hastily conceived, planned and conducted. I have received more regular research supervision in the last few weeks and this has been helpful for planning the write up and reviewing data.

## Appendices

### Appendix i: Table of studies used for Critical Literature Review

Author(s) & date	Participants	Design	Measures	Key results
Harry & Resnick (1986)	3 male US homicide perpetrators	Case report series	None, descriptive only	All 3 cases described were thought to meet criteria for PTSD based on clinical judgement 2 out of 3 dissociated at time of offence
Curle (1989)	128 sets of case notes reviewed, 82 participants interviewed. All male perpetrators of violence detained at Broadmoor Special Hospital	Case note review and interview	None, descriptive only	Symptoms of stress reported by many participants, 24% reported current intrusive symptoms, 34% past intrusions
Hambridge (1990)	3 UK homicide perpetrators	Case report	None, descriptive only	N/a
Kruppa (1991)	1 male UK homicide perpetrator	Case report	None, descriptive only	Clinician judged PTSD to have been successfully treated with flooding
Thomas et al. (1994)	1 female UK homicide perpetrator	Case report	None, descriptive only	PTSD remitted after combined pharmacological and psychological therapy
Kruppa et al. (1995)	11 female & 33 UK male patients	Cross sectional;	PTSD-I	75% of the sample identified their index

	detained at Rampton Special Hospital	clinical interview		offence as traumatic
				32% of the sample achieved lifetime diagnosis of full PTSD (for 50% of these the trauma was the index offence)
Pollock (1999)	80 male UK homicide perpetrators	Cross sectional; clinical interview	PTSD-I, SHAPS, rating of form of violence (instrumental or reactive)	52% met criteria for current PTSD
Pollock (2000)	1 male UK forensic inpatient	Case report	CAPS, TSI	Perpetrator of homicide met criteria for current PTSD Treated successfully with EMDR
Rogers et al. (2000)	1 female UK forensic inpatient	Case report	BDI, IES, PSS-SR	
Spitzer et al. (2001)	51 male & 2 female German forensic inpatients	Cross sectional; clinical interview & self report	CAPS, DES, MPSS, SCL- 90-R	9% of sample described their own offence as violent, all of these met criteria for lifetime PTSD 36% of sample lifetime prevalence of PTSD
Gray et al. (2003)	32 male & 5 female UK forensic medium	Cross sectional; clinical	BDI, IES, STAI	33% of sample met diagnostic criteria for PTSD

	secure unit inpatients	interview		
Papanastas siou et al. (2004)	16 male & 3 female forensic inpatients in a UK medium secure unit	Cross sectional; clinical interview	CAPS	100 % of the sample identified index offence as traumatic 58% of sample had lifetime (since offence) history of full PTSD a further 21% met criteria for partial PTSD Killing of a family member made developing PTSD significantly more likely Early adverse events shown to reduce likelihood of developing PTSD
Evans et al. (2007a)	105 male UK Young Offenders	Cross sectional; semi- structured interview	PSS-I, TIOI, QT, II, RI	45.7% of sample reported intrusive memories of offence 5.7% of sample met full criteria for PTSD
Evans et al. (2007b)	105 male UK Young Offenders	As above	PSS-I	As above
Crisford et al. (2008)	43 male & 2 female forensic inpatients at a UK regional secure	Cross sectional; clinician administere	DAPS, QT, Revised GBAI, TRGI-GC, PANAS	40% of sample met criteria for current offence-related PTSD

	unit	d and self report measures		
<b>Studies with veteran populations</b>				
Henning & Frueh (1997)	40 male US veterans with a diagnosis of PTSD	Cross sectional; interview & self report measures	CAPS, M- PTSD, RCS, TGI: TG, CGS	Whole sample had PTSD
MacNair (2002)	1638 male US Vietnam veterans	Secondary data analysis from NVVRS	M-PTSD	Mean score on M- PTSD significantly different for those who said they had killed as compared to those who said they hadn't
Maguen et al. (2009)	259 male US Vietnam veterans from the National Vietnam Veterans Readjustment Study (NVVRS)	Cross sectional; clinical interview	M-PTSD, MMPI-PK, combat exposure measure, killing experience measure, PDEQ, SCID, a readjustment measure and a violent behaviour measure	PTSD symptoms found to be associated with killing in combat
Maguen et al. (2010)	2797 US Iraq veterans	Secondary data	PC-PTSD, a measure of	22% of sample met threshold screening

		analysis using Army post- deployment screening database	combat exposure, a measure of killing experience, PHQ9, AUDIT, DAR	criteria for PTSD Killing in combat a significant predictor of PTSD symptoms and alcohol use
Marx et al. (2010)	1323 male US Vietnam veterans	Secondary analysis of the VA Cooperative Study 334 examining the utility of psychophysio logical assessment of PTSD	WSI, CES, SCID, & LPI	Combat related guilt found to be a partial mediating factor in the relationship between participation in combat related abusive violence and PTSD
Maguen et al. (2011)	234 male & 83 female US Gulf War veterans	Cross sectional; postal survey	PCL-M, a measure about war experience, BDI-PC, CAGE	20% met threshold screening criteria for PTSS
Pietrzak et al. (2011)	285 US Iraq & Afghanistan veterans	Cross sectional; postal survey	PCL-M, CES	21% of sample met criteria for PTSD 45.6% of these reported killing in combat 15% of the non PTSD group reported killing in combat

Van Winkle & Safer (2011)	376 male Vietnam veterans	Secondary data analysis from NVVRS	M-PTSD, combat exposure measure, domestic violence measure	Soldiers who reported killing in combat reported elevated levels of PTSD symptoms compared to those who had not killed
Maguen et al. (2013)	227 US Iraq & Afghanistan veterans who met DSM-IV criteria for partial or full PTSD	Cross sectional; postal survey	PCL-M, DRRI-CE, additional items about type and circumstance of killing	Those who had killed had twice the odds of being in the most symptomatic PTSD group than those who hadn't

#### **Studies of other groups**

Gersons (1989)	37 Dutch police officers	Cross sectional, clinical interview	None – semi structured interview	46% of sample met criteria for lifetime PTSD 46% met criteria for partial PTSD
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Note. AUDIT = Alcohol Use Disorder Identification Test; BDI = Beck Depression Inventory; BDI-PC = Beck Depression Inventory – Primary Care; CAGE = a measure of alcohol use; CAPS = Clinician Administered PTSD Scale; CES = Combat Experiences Scale; CGS = Combat Guilt Scale; DAPS = Detailed Assessment of Posttraumatic Stress; DAR = Dimensions of Anger; DES = Dissociative Experiences Scale; DRRI-CE = Deployment Risk & Resilience Inventory – Combat Exposure subscale; GBAI = Gudjonsson Blame Inventory; IES = Impact of Events Scale; II = Intrusion Interview; LPI = Laufer-Parsons Inventory of Combat Guilt; MMPI-K = Minnesota Multiphasic Personality Inventory-2 PTSD Keane Scale; MPSS = Modified PTSD Symptom Scale; M-PTSD = Mississippi Scale for Combat Related PTSD; PANAS = Positive & Negative Affect Scale; PCL-M = PTSD Checklist – Military version; PC – PTSD = Primary Care PTSD Screen; PDEQ = Peritraumatic Dissociative Experiences Questionnaire; PHQ9 = Patient Health Questionnaire; PSS-I = PTSD Symptom Scale – Interview; PSS-SR = PTSD Symptom Scale - Self Report; PTSD-I = PTSD Interview Schedule; QT = Quick Test; RCS = Revised Combat Scale; RI = Rumination Interview; SCID =



Structured Clinical Interview for DSM; SCL-90-R = Symptom Checklist; SHAPS = Special Hospitals Assessment of Personality Scale; STAI = State Trait Anxiety Inventory; TGI: TG = The Guilt Inventory: Trait Guilt; TIOT = The Index Offence Interview; TRGI-GC = Trauma Related Guilt Inventory – Guilt Cognitions; TSI = Trauma Symptom Inventory; WSI = War Stress Inventory

## **Appendix ii: Clinical Psychology Review Guide for Authors**

### **CLINICAL PSYCHOLOGY REVIEW**

#### **DESCRIPTION**

Clinical Psychology Review publishes substantive reviews of topics germane to clinical psychology. Papers cover diverse issues including: psychopathology, psychotherapy, behavior therapy, cognition and cognitive therapies, behavioral medicine, community mental health, assessment, and child development. Papers should be cutting edge and advance the science and/or practice of clinical psychology.

Reviews on other topics, such as psychophysiology, learning therapy, experimental psychopathology, and social psychology often appear if they have a clear relationship to research or practice in clinical psychology. Integrative literature reviews and summary reports of innovative ongoing clinical research programs are also sometimes published. Reports on individual research studies and theoretical treatises or clinical guides without an empirical base are not appropriate.

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### **Appendix iii: Quotes from parents and recommendations for service improvements**

#### **Someone to talk to**

“It’s a little bit of a gap I think...I think they need somebody [a member of staff/volunteer] there...just to have a chat to”

“...just that I think it’s needed, that ‘I’m here if you need me, even if it’s something that you know you need to refer to the nurses or the doctors, just be aware my door is open and I can talk to you’.”

- **Recommendation 1:** Existing informal networks of support between parents could be supplemented by the introduction of a peer support group or online forum or introduction of a ‘buddy’ scheme

#### **Induction**

“Like a little induction...a bit more personal, sit down, you know, a two minute...just ‘are there any concerns you’ve got? This is how we do things here, we like to do this, that and the other, we don’t advise bathing ‘til XYZ’ you know...”

“...quick induction, a quick ‘this is how we do things, this is what we like you to know...’, you know, the set measureables ‘...and then anything else, you know, just have a chat if you’ve got any questions’ kind of thing is probably a nice touch.”

- **Recommendation 2:** An induction pack containing information about the NICU, definitions of commonly used terms and signposting to sources of support should be provided to all parents. This information should also be accessible to parents who have problems with literacy. This should be supplemented with a short induction chat with parents including encouragement to ask questions if they need to. This may be supported by encouraging parents to record the conversation to help them retain the information (see Koh, 2013). Quotes from parents gathered through this project could be gathered and collated into a patient experience booklet which could be included in this pack

#### **Access to the unit**

“I think...the cards we use to get out, they could use better cards to let us in.”

“I tend to come in now...quite early in the morning, so I’m sort of here about half 7 and that’s not a problem...we...we come and go as it suits us really”

“A six hour day in with your baby in Bath is comfortable whereas in other units...its cramped and you know you’ve got literally incubator on incubator. It does make you feel less likely...or less want to stay...”

- **Recommendation 3:** Maintain the huge improvements that have been made with regard to the accessibility of the babies to their parents

### **Feeling involved**

“...your baby being on a webcam...so you could log in...ability to be able to see your baby...that’s something I did feel would be a benefit. I felt that it possibly could lessen the calls for the nurses because if you could see your baby’s ok then...you’d probably leave it ‘til the next day.”

“...whether there would be an ability to view the online notes...just the day notes...it sounds ridiculous doesn’t it, but you know ‘nappy = wet and bowels open’...see how his day’s been...did he feed his full bottle...”

- **Recommendation 4:** Staff need to remember the importance of their contact with parents. Although this may seem incidental to nursing the babies it is of immense value to parents

### **Additional recommendations:**

- For parents who have and use smart phones and tablets, suggest downloading the MyPremie app (Doron, Trenti-Paroli, & Linden, 2013)
- Explore the feasibility of a web based programme for parents such as BabyLink (Freer, Lyon, Stevenson, & Russell, 2005)
- Ongoing audit is essential but must be carried out from the premise that parents will find it hard to be critical about the unit and the audit process must address this
- Any holistic assessment that is carried out must be brief and acceptable to parents
- Where possible a brief discharge planning meeting should be held to help parents to feel involved in this process and to manage the transition of care from hospital to home

### **Recommendations for the longer term:**

#### **Accommodation**

“...rentable flats...the cost has mounted. It doesn’t have to be anything like 5 star, grand hotel or anything like that but if there was something on site, purely for this sort of thing or even for, you know, people that have...in a situation where they’re down this end on holiday, they’ve had an accident or something and they’ve ended up in here...parents could come down, or family could come down and not have to pay £150 price tag on a hotel...Portakabin sort of thing, somewhere to get your head down, I would have been more than happy to pay some money to stay here and be able to come home here whilst the boys were here sort of thing, you know...I think something like that could be looked at, it doesn’t have to be completely funded by the NHS. I think that because its rentable accommodation, you know, and if anything because the



amount of people, the turnaround of people you'd get in it, it's not as if you'd have them all empty at all time."

- Consider possible options for providing affordable accommodation for parents while their babies remain in NICU.

## Appendix iv: Journal of Gynaecological & Neonatal Nursing Guidelines for Authors

### GUIDELINES FOR AUTHORS

*The Journal of Obstetric, Gynecologic, & Neonatal Nursing (JOGNN)* is the official journal of the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN). A peer-reviewed journal, *JOGNN* reflects practice, research, policies, opinions, and trends in the care of women, childbearing families, and newborns. *JOGNN* presents the scholarship that is the driving force behind nursing practice. Although not required, queries may be addressed to Nancy K. Lowe, CNM, PhD, FACNM, FAAN, Editor, *JOGNN*, University of Colorado Denver, College of Nursing, C288-28, 13120 East 19th Ave., Aurora, CO 80045. For additional information about *JOGNN* go to <http://jognn.awhonn.org>, e-mail [JOGNN@awhonn.org](mailto:JOGNN@awhonn.org), or call 877-234- 3925.

Authors should submit manuscripts via the Internet at <http://jognn.edmgr.com> (Editorial Manager). Detailed instructions for first time users are available on the Editorial Manager Web site. Once a manuscript is submitted in Editorial Manager, the corresponding author will be notified by e-mail.

The editor welcomes manuscripts in the following categories:

**Research**— reports of original studies that generate new knowledge for clinical practice.

**In Review**— systematic or integrated literature reviews, including specific implications for practice, policy, or research.

**Principles & Practice**— analysis of innovations and trends in clinical practice, care delivery systems, education programs, and public policy; reports of quality improvement and program evaluation projects with clear implications for practice beyond the study site using the SQUIRE guidelines (Cook & Lowe, 2012).

**Case Reports**— new information through case reviews of nursing and inter-professional care. Authors must provide written consent from the participant when clinical descriptions make identification possible.

**Contemporary Perspectives**— brief, critical commentaries on professional issues or societal trends.

**Letters to the Editor**— points of current interest or comments on an article published in the journal. The editor reserves the right to accept, reject, or excerpt letters. Letters should reference published articles no later than three months after publication.

**In Focus**— department within *JOGNN* that provides in-depth treatment of current topics.

Invited guest editors solicit focused manuscripts for review. Queries from potential guest editors of proposed series may be addressed to Marilyn Stringer, PhD, WHNP-BC, RDMS, [stringer@nursing.upenn.edu](mailto:stringer@nursing.upenn.edu)

### Requirements for Submissions:

1. Manuscripts must be original, not published previously, and not under consideration by another publication. The editor will consider publishing a complete report following the publication of preliminary findings (e.g., in an abstract) or presentations.
2. All authors must sign a [copyright transfer](#). This form should be sent via hard copy to the Managing Editor at 308 New York Avenue, Salisbury, MD 21801.
3. The authors must disclose any commercial interest they have in the subject of their study as well as the source of any financial or material support. Each author must complete an author disclosure form, which will be uploaded with the manuscript files in the Editorial Manager system.

4. A copy of institutional review board (IRB) approval (or a letter from the IRB chair stating that approval for the study is not required) is required for any research published in *JOGNN*.

#### **Note to NIH Grantees**

Pursuant to NIH mandate, *JOGNN* publisher Wiley-Blackwell will post the accepted version of contributions authored by NIH grant-holders to PubMed Central upon acceptance. This accepted version will be made publicly available 12 months after publication. For further information, see [www.wiley.com/go/nihmandate](http://www.wiley.com/go/nihmandate).

#### **AUTHORSHIP**

In order to qualify as an author for a manuscript submitted to *JOGNN*, all persons designated as authors should qualify for authorship, and all those who qualify should be listed. Each author should have participated sufficiently in the work to take public responsibility for appropriate portions of the content. Such participation ordinarily includes all of the following:

- Involvement in conception or design of the project or other scholarly work
- Important contribution(s) to critical aspects of the conduct of the research or other scholarly work
- Drafting the article submitted and revising it for important intellectual content
- Approval of the final, submitted version

Participation that does not qualify for authorship includes data gathering, provision of financial or other support, or review of a preliminary draft. When a large, multi-center group has conducted the work, the group should identify the individuals who accept direct responsibility for the manuscript.

The maximum number of authors usually permitted is six on Research articles and four on all other types of articles. If more than these numbers of authors are desired, specific information explaining the role of each author should be included in a cover letter.

For further information visit the International Committee of Medical Journal Editors website at <http://www.icmje.org/#author>.

#### **Reporting Guidelines**

*JOGNN* has adopted the following reporting guidelines. Links on the author's resource page (<http://www.editorialmanager.com/jognn/account/AuthorPage.html>) provide specific, detailed information about each of the guidelines and associated checklists. When submitting manuscripts, please use these checklists.

#### **CONSORT**

The CONSolidated Standards Of Reporting Trials (CONSORT) provides direction for reporting randomized controlled trials and includes the CONSORT Statement, a checklist focused on the structure of the report, and a flow diagram to document the progression of all participants through the trial.

#### **STROBE**

The STROBE guidelines stand for STrengthening the Reporting of OBservational studies in Epidemiology. Similar to CONSORT, these guidelines provide direction for the reporting of nonexperimental quantitative research.

#### **PRISMA**

The Preferred Reporting Items of Systematic reviews Meta-Analyses (PRISMA) provides standards for the preparation of reports of systematic literature reviews and metaanalyses. An

expansion of the previous QUOROM Statement, PRISMA can be applied to reviews of randomized trials and other types of research and includes a checklist and flow diagram. Also review the guidance provided in “Systematic reviews” (Lowe, 2009).

### **MOOSE**

The MOOSE guidelines provide specific direction for reporting Meta-analysis Of Observational Studies in Epidemiology.

### **SQUIRE**

The SQUIRE guidelines provide Standards for Quality Improvement Reporting Excellence. These guidelines should be used for all reports of quality improvement projects.

### **STARD**

The STARD statement provides STAndards for the Reporting of Diagnostic accuracy studies.

### **CARE**

The CAse REport (CARE) guidelines include recommendations and a 13-item checklist for guidance in writing a case report. Although written from a medical perspective, these guidelines are generally applicable to nursing case reports.

### **Preparation for all Manuscripts:**

Double-space all pages, including the abstract, text, references, tables, and legends. Use 12-point font and uniform margins of 1" at the top, bottom, right, and left. Do not right justify lines. Do not divide words at the end of a line.

Number pages consecutively. Include a running head, a shortened version of the title with 60 characters or fewer, at the top of each page to identify the manuscript. The running head must not contain any author names or initials. In the left margin, consecutively number each line of text.

The average article in *JOGNN* is 15 to 18 manuscript pages, plus references, tables, illustrations, and callouts. In Review articles can be longer than 18 pages if indicated.

Refer to the *Publication Manual of the American Psychological Association (APA)*, sixth edition, for grammar, punctuation, and style; *Webster's Eleventh Collegiate Dictionary* for spelling of non technical words; *Dorland's Illustrated Medical Dictionary* for spelling of medical terms; and Haller and Holditch-Davis (2000) for guidelines on statistical reporting. In general, it is not necessary to specify the statistical package used to analyze research data. Use generic names of all drugs and products. Report physical measures in SI (International System of Units) units. For examples of conversion to SI equivalents, refer to the APA manual.

Authors for whom English is a second language are encouraged to have their manuscript professionally edited before submission. A list of independent suppliers of editing services can be found at [www.blackwellpublishing.com/bauthor/english\\_language.asp](http://www.blackwellpublishing.com/bauthor/english_language.asp). All services are paid for and arranged by the author, and use of one of these services does not guarantee acceptance or preference for publication.

### **Title:**

Limit the title to no more than 15 words. Ensure that the title summarizes the main idea of the paper; is fully explanatory standing alone; and avoids the use of the words method, results, a study, and an experimental investigation. Colons in titles should be avoided. See Ryan-Wenger (1992) for guidelines regarding the titling of research reports.

**Keywords:**

Submit 3–10 keywords with the abstract for use in indexing the article.

**Abstract:**

See Watson (2006) for general guidelines regarding writing abstracts.

**Abstracts for Principles & Practice, Case Reports, Contemporary Perspectives, and In Focus Articles (that are not research reports).**

Enclose an abstract of no more than 75 words (in paragraph form). The abstract should be factual, not descriptive, giving the main points of the paper. Instead of saying what will be described, describe it.

**Abstracts for Research Articles.**

Enclose an abstract of no more than 250 words, using the following headings:

- Objective
- Design
- Setting
- Participants
- Methods
- Results
- Conclusion

See Haynes, Mulrow, Huth, Altman, and Gardner (1990) for more information on research abstracts.

**Abstracts for In Review Articles.**

Enclose an abstract of no more than 300 words, using the following headings:

- Objective
- Data Sources
- Study Selection
- Data Extraction
- Data Synthesis
- Conclusions

Refer to Haynes et al. (1990) for more information.

**Callouts:**

Provide three call outs of not more than 25 words each. Callouts highlight a major premise or conclusion of an article. The author may use direct quotes from the manuscript or write new sentences. Indicate in the manuscript approximately where each callout should appear in the published article. Avoid repeating text found in the abstract or the first page of the article. Callouts for research articles should identify the problem the study addresses, the primary conclusions of the study, the major implication for practice, or factors that contribute to the conclusions of the study. Callouts for all other articles should describe the major reason for addressing the topic of the article, identify the primary conclusion, and identify the major implication for practice.

**References:**

Cite current primary sources only. Use references prudently. Cite references in the text in the style outlined in the *Publication Manual of the American Psychological Association*, sixth edition. The reference list also should be formatted in APA style. Identify sources of quotations and all other borrowed materials.

**Permissions:**

Long quotations, figures, tables, or photographs from previously published sources must be accompanied by the written permission of the copyright holder. This includes any table or figure that replicates 50% or more of another table or figure.

Authors must include documentation indicating print and electronic permissions with the submitted manuscript. For complete permissions guidelines, please refer to

<http://www.blackwellpublishing.com/permis.asp?ref=0884-2175>

**Tables:**

Do not include more than six tables. Submit only actual tabular material in table form. Simple lists should be incorporated into the text. Type each table on a separate page with its own title. Number tables consecutively with Arabic numerals and cite in numeric order in the text. Number pages with tables following the reference list. The author must obtain written permission from the original publisher to include a previously published table with the article (see “Permissions” above for more information). Each previously published table must carry a credit line stating the original source.

Refer to *Presenting your findings: a practical guide for creating tables* (Nicol & Pexman, 1999) for presentation of statistical data. Tables of studies included in systematic reviews should use the following column headings: author/date, participants, methods, interventions, outcomes. Information included for each study should be presented in a standardized manner and be as succinct as possible.

**Artwork:****Figures, graphs, and illustrations.**

Figures should be uploaded with the manuscript via the Editorial Manager system. Image files may be part of the manuscript itself or may be submitted as separate files in .JPG, .TIF, or .EPS format. Image files must be high-resolution: at least 300 dpi. If your manuscript includes figures, tables, photos or other visuals, please refer to the guidelines of our publisher, Wiley-Blackwell, at <http://authorservices.wiley.com/bauthor/illustration.asp>.

Each figure, graph, or illustration should be on a separate page with its own title. Number figures consecutively with Arabic numerals, and cite each figure in numeric order in the text. Number pages with figures following the reference page(s) and table page(s). Follow APA style when labeling tables, figures, and photographs. Keep all explanatory material and legends in the captions beneath the figure, graph, or illustration to which they pertain. The author must obtain written permission of the original publisher to include a previously published figure. The author must obtain subjects’ written permission to publish their photographs in *JOGNN*.

**Supplemental data:**

Authors are encouraged to submit supplemental files with their manuscripts. Supplemental data should enhance the content of the manuscript but should not be essential to the meaning. These files can include short video clips, interviews, data sets, evidence tables, additional figures, etc. and will be reviewed with the manuscript. If accepted, they will be available on line. For additional information, please contact the managing editor at [jognn@awhonn.org](mailto:jognn@awhonn.org).

**Manuscript Checklist:**

- The manuscript is blinded and contains no identifying information. Each page has a running head that does not include author names or initials.
- First page includes title, abstract and keywords.
- Three callouts (page 2).
- Text (page 3). Each line of text is numbered consecutively in the left margin.
- References (begin on a new page).

- Tables (each on a separate page).
- Figures (each on a separate page).

**Submission Checklist:**

—Cover letter submitted electronically includes (a) all author names in the order they should appear in the by line; (b) the name, complete mailing address, and e-mail address of the author who will be responsible for correspondence regarding the manuscript; (c) author identification notes including name, credentials, position title, place of employment or organizational affiliation, city, and state for all authors; (d) a statement that all authors have seen and approved the manuscript; (e) acknowledgment of funding sources for research or significant nonauthor contributions to the work limited to 25 words; (f) additional information that may be helpful to the editor, such as the type of article the manuscript represents; (g) information on previous or duplicate publication or submission.

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The editorial staff will return, unreviewed, manuscripts that are submitted without a copyright transfer or are not formatted per the author guidelines.

**Publication:**

Articles become available online for citation before the print version is published. Some accepted articles may also be presented in the print version at the discretion of the editors. The online version of *JOGNN* is the journal of record, and Impact Factors and other citation indices are based on the online article.

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OnlineOpen is available to authors of primary research who wish to make their articles available to non-subscribers on publication or whose funding agencies require grantees to archive the final version. With OnlineOpen, the author, the author's funding agency, or the author's institution pays a fee to ensure that the article is made available to non-subscribers upon publication via Wiley Online Library and deposited in the funding agency's preferred archive. For the full list of terms and conditions, see

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**References**

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#### ***Appendix iv – Clinical Psychology & Psychotherapy Guidelines for Authors***

### **MANUSCRIPT SUBMISSION**

*Clinical Psychology & Psychotherapy* operates an online submission and peer review system that allows authors to submit articles online and track their progress via a web interface. Please read the remainder of these instructions to authors and then visit <http://mc.manuscriptcentral.com/cpp> and navigate to the *Clinical Psychology & Psychotherapy* online submission site.

**IMPORTANT:** Please check whether you already have an account in the system before trying to create a new one. If you have reviewed or authored for the journal in the past year it is likely that you will have had an account created.

### **Pre-submission English-language editing**

Authors for whom English is a second language may choose to have their manuscript professionally edited before submission to improve the English. A list of independent suppliers of editing services can be found at <http://wileyeditingservices.com/en/>. All services are paid for and arranged by the author, and use of one of these services does not guarantee acceptance or preference for publication.

### **All papers must be submitted via the online system.**

**File types.** Preferred formats for the text and tables of your manuscript are .doc, .docx, .rtf, .ppt, .xls. **LaTeX** files may be submitted provided that an .eps or .pdf file is provided **in addition** to the source files. Figures may be provided in .tiff or .eps format.

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LaTeX users. For reviewing purposes you should upload a single .pdf that you have generated from your source files. You must use the File Designation "Main Document" from the dropdown box.

### **REVISED MANUSCRIPT**

Non-LaTeX users. Editable source files must be uploaded at this stage. Tables must be on separate pages after the reference list, and not be incorporated into the main text. Figures should be uploaded as separate figure files.

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source files. For all your source files you must use the File Designation "Supplemental Material not for review". Previous versions of uploaded documents must be deleted. If your manuscript is accepted for publication we will use the files you upload to typeset your article within a totally digital workflow.

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If you select the OnlineOpen option and your research is funded by The Wellcome Trust and members of the Research Councils UK (RCUK) you will be given the opportunity to publish your article under a CC-BY license supporting you in complying with Wellcome Trust and Research Councils UK requirements. For more information on this policy and the Journal's compliant self-archiving policy please visit: <http://www.wiley.com/go/funderstatement>.

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Submission of a manuscript will be held to imply that it contains original unpublished work and is not being submitted for publication elsewhere at the same time.

**Title and Abstract Optimisation Information.** As more research is read online, the electronic version of articles becomes ever more important. In a move to improve search engine rankings for individual articles and increase readership and future citations to Clinical Psychology & Psychotherapy at the same time please visit [Optimizing Your Abstract for Search Engines](#) for guidelines on the preparation of keywords and descriptive titles.

**Manuscript style.** The language of the journal is (British) English. All submissions must have a title, be printed on one side of A4 paper with numbered pages, be double-line spaced and have a 3cm wide margin all around. Illustrations and tables must be printed on separate sheets, and not incorporated into the text.

## MANUSCRIPT STYLE

The language of the journal is English. 12-point type in one of the standard fonts: Times, Helvetica, or Courier is preferred. It is not necessary to double-line space your manuscript. Tables must be on separate pages after the reference list, and not be incorporated into the main text. Figures should be uploaded as separate figure files.

- During the submission process you must enter the full title, short title of up to 70 characters and names and affiliations of all authors. Give the full address, including email, telephone and fax, of the author who is to check the proofs.
- Include the name(s) of any **sponsor(s)** of the research contained in the paper, along with **grant number(s)**.
- Enter an **abstract** of up to 250 words for all articles [except book reviews]. An abstract is a concise summary of the whole paper, not just the conclusions, and is understandable without reference to the rest of the paper. It should contain no citation to other published work.
- All articles should include a **Key Practitioner Message** — 3-5 bullet points summarizing the relevance of the article to practice.
- Include up to six **keywords** that describe your paper for indexing purposes.

**Research Articles:** Substantial articles making a significant theoretical or empirical contribution.

**Reviews:** Articles providing comprehensive reviews or meta-analyses with an emphasis on clinically relevant studies.

**Assessments:** Articles reporting useful information and data about new or existing measures.

**Practitioner Reports:** Shorter articles that typically contain interesting clinical material.

**Book Reviews:** Published on invitation only. Critical summaries of recent books that are of general interest to readers of the journal.

**Reference style .** The APA system of citing sources indicates the author's last name and the date, in parentheses, within the text of the paper.

**A. A typical citation of an entire work consists of the author's name and the year of publication .**

Example: Charlotte and Emily Bronte were polar opposites, not only in their personalities but in their sources of inspiration for writing (Taylor, 1990). Use the last name only in both first and subsequent citations, except when there is more than one author with the same last name. In that case, use the last name and the first initial.

**B. If the author is named in the text, only the year is cited .**

Example: According to Irene Taylor (1990), the personalities of Charlotte. . .

**C. If both the name of the author and the date are used in the text, parenthetical reference is not necessary .**

Example: In a 1989 article, Gould explains Darwin's most successful. . .

**D. Specific citations of pages or chapters follow the year .**

Example: Emily Bronte "expressed increasing hostility for the world of human relationships, whether sexual or social" (Taylor, 1988, p. 11).

**E. When the reference is to a work by two authors, cite both names each time the reference appears .**

Example: Sexual-selection theory often has been used to explore patters of various insect matings (Alcock & Thornhill, 1983) . . . Alcock and Thornhill (1983) also demonstrate. . .

**F. When the reference is to a work by three to five authors, cite all the authors the first time the reference appears. In a subsequent reference, use the first author's last name followed by *et al* . (meaning "and others") .**

Example: Patterns of byzantine intrigue have long plagued the internal politics of community college administration in Texas (Douglas *et al* ., 1997) When the reference is to a work by six or more authors, use only the first author's name followed by *et al* . in the first and all subsequent references. The only exceptions to this rule are when some confusion might result because of similar names or the same author being cited. In that case, cite enough authors so that the distinction is clear.

**G. When the reference is to a work by a corporate author, use the name of the organization as the author .**

Example: Retired officers retain access to all of the university's educational and recreational facilities (Columbia University, 1987, p. 54).

**H. Personal letters, telephone calls, and other material that cannot be retrieved are not listed in References but are cited in the text .**

Example: Jesse Moore (telephone conversation, April 17, 1989) confirmed that the ideas. . .

**I. Parenthetical references may mention more than one work, particularly when ideas have been summarized after drawing from several sources. Multiple citations should be arranged as follows .**

Examples:

- List two or more works by the same author in order of the date of publication: (Gould, 1987, 1989)
- Differentiate works by the same author and with the same publication date by adding an identifying letter to each date: (Bloom, 1987a, 1987b)
- List works by different authors in alphabetical order by last name, and use semicolons to separate the references: (Gould, 1989; Smith, 1983; Tutwiler, 1989).

All references must be complete and accurate. Where possible the [DOI](#) for the reference should be included at the end of the reference. Online citations should include date of access. If necessary, cite unpublished or personal work in the text but do not include it in the reference list. References should be listed in the following style:

**Journal Article**

Gardikiotis, A., Martin, R., & Hewstone, M. (2004). The representation of majorities and minorities in the British press: A content analytic approach. *European Journal of Social Psychology*, 34 , 637-646. DOI: 10.1002/ejsp.221

**Book**

Paloutzian, R. F. (1996). *Invitation to the psychology of religion* (2nd ed.). Boston: Allyn and Bacon.

**Book with More than One Author**

Natarajan, R., & Chaturvedi, R. (1983). *Geology of the Indian Ocean* . Hartford, CT: University of Hartford Press.

Hesen, J., Carpenter, K., Moriber, H., & Milsop, A. (1983). *Computers in the business world* . Hartford, CT: Capital Press. and so on.

The abbreviation *et al.* is not used in the reference list, regardless of the number of authors, although it can be used in the text citation of material with three to five authors (after the initial citation, when all are listed) and in all parenthetical citations of material with six or more authors.

**Web Document on University Program or Department Web Site**

Degelman, D., & Harris, M. L. (2000). *APA style essentials* . Retrieved May 18, 2000, from Vanguard University, Department of Psychology Website:  
[http://www.vanguard.edu/faculty/ddegelman/index.cfm?doc\\_id=796](http://www.vanguard.edu/faculty/ddegelman/index.cfm?doc_id=796)

### **Stand-alone Web Document (no date)**

Nielsen, M. E. (n.d.). *Notable people in psychology of religion* . Retrieved August 3, 2001, from <http://www.psywww.com/psyrelig/psyrelpr.htm>

### **Journal Article from Database**

Hien, D., & Honeyman, T. (2000). A closer look at the drug abuse-maternal aggression link. *Journal of Interpersonal Violence*, 15 , 503-522. Retrieved May 20, 2000, from ProQuest database.

### **Abstract from Secondary Database**

Garrity, K., & Degelman, D. (1990). Effect of server introduction on restaurant tipping. *Journal of Applied Social Psychology*, 20 , 168-172. Abstract retrieved July 23, 2001, from PsycINFO database.

### **Article or Chapter in an Edited Book**

Shea, J. D. (1992). Religion and sexual adjustment. In J. F. Schumaker (Ed.), *Religion and mental health* (pp. 70-84). New York: Oxford University Press.

\*The Digital Object Identifier (DOI) is an identification system for intellectual property in the digital environment. Developed by the International DOI Foundation on behalf of the publishing industry, its goals are to provide a framework for managing intellectual content, link customers with publishers, facilitate electronic commerce, and enable automated copyright management.

**Illustrations.** Upload each figure as a separate file in either .tiff or .eps format, the figure number and the top of the figure indicated. Compound figures e.g. 1a, b, c should be uploaded as one figure. Grey shading and tints are not acceptable. Lettering must be of a reasonable size that would still be clearly legible upon reduction, and consistent within each figure and set of figures. Where a key to symbols is required, please include this in the artwork itself, not in the figure legend. All illustrations must be supplied at the correct resolution:

- Black and white and colour photos - 300 dpi
- Graphs, drawings, etc - 800 dpi preferred; 600 dpi minimum
- Combinations of photos and drawings (black and white and colour) - 500 dpi

The cost of printing **colour** illustrations in the journal will be charged to the author. The cost is approximately £700 per page. If colour illustrations are supplied electronically in either **TIFF** or **EPS** format, they **may** be used in the PDF of the article at no cost to the author, even if this illustration was printed in black and white in the journal. The PDF will appear on the *Wiley Online Library* site.

## POST ACCEPTANCE

**Further information.** For accepted manuscripts the publisher will supply proofs to the corresponding author prior to publication. This stage is to be used only to correct errors that may have been introduced during the production process. Prompt return of the corrected proofs, preferably within two days of receipt, will minimise the risk of the paper being held over to a later issue. Once your article is published online no further amendments can be made. Free access to the final PDF offprint or your article will be available via author services only. Please therefore sign up for author services if you would like to access your article PDF offprint and enjoy the many other benefits the service offers

**Author Resources.** Manuscript now accepted for publication?

If so, visit out our suite of tools and services for [authors](#) and sign up for:

- Article Tracking
- E-mail Publication Alerts
- Personalization Tools

**Cite EarlyView articles.** To link to an article from the author's homepage, take the DOI (digital object identifier) and append it to "http://dx.doi.org/" as per following example:

DOI 10.1002/hep.20941, becomes <http://dx.doi.org/10.1002/hep.20941>.

## Appendix v: Bath Bitterness Questionnaire (BBQ)

Most people experience difficult everyday events in their life at some time or another, for example the end of a relationship or losing a job. This questionnaire is designed to assess how affected you have been by things that have happened to you.

**Please indicate how much the following statements are true for you as a person:**

		Not at all		Somewhat			Very much	
1	I feel I have got a raw deal out of life	0	1	2	3	4	5	6
2	There is a lot that I have been prevented from achieving in life	0	1	2	3	4	5	6
3	I have given up thinking that working hard is rewarded	0	1	2	3	4	5	6
4	Other people always seem to have better luck than me	0	1	2	3	4	5	6
5	Nobody else really understands what I've been through	0	1	2	3	4	5	6
6	I feel frustrated that I can't do anything to change my current situation	0	1	2	3	4	5	6
7	I haven't had the advantages that others have had in life	0	1	2	3	4	5	6
8	When people are especially nice, I wonder what they want	0	1	2	3	4	5	6
9	I wonder why I bother to keep going	0	1	2	3	4	5	6
10	In the end my efforts are never really appreciated	0	1	2	3	4	5	6
11	Other people always pick up on my mistakes	0	1	2	3	4	5	6
12	I feel pessimistic about my future	0	1	2	3	4	5	6

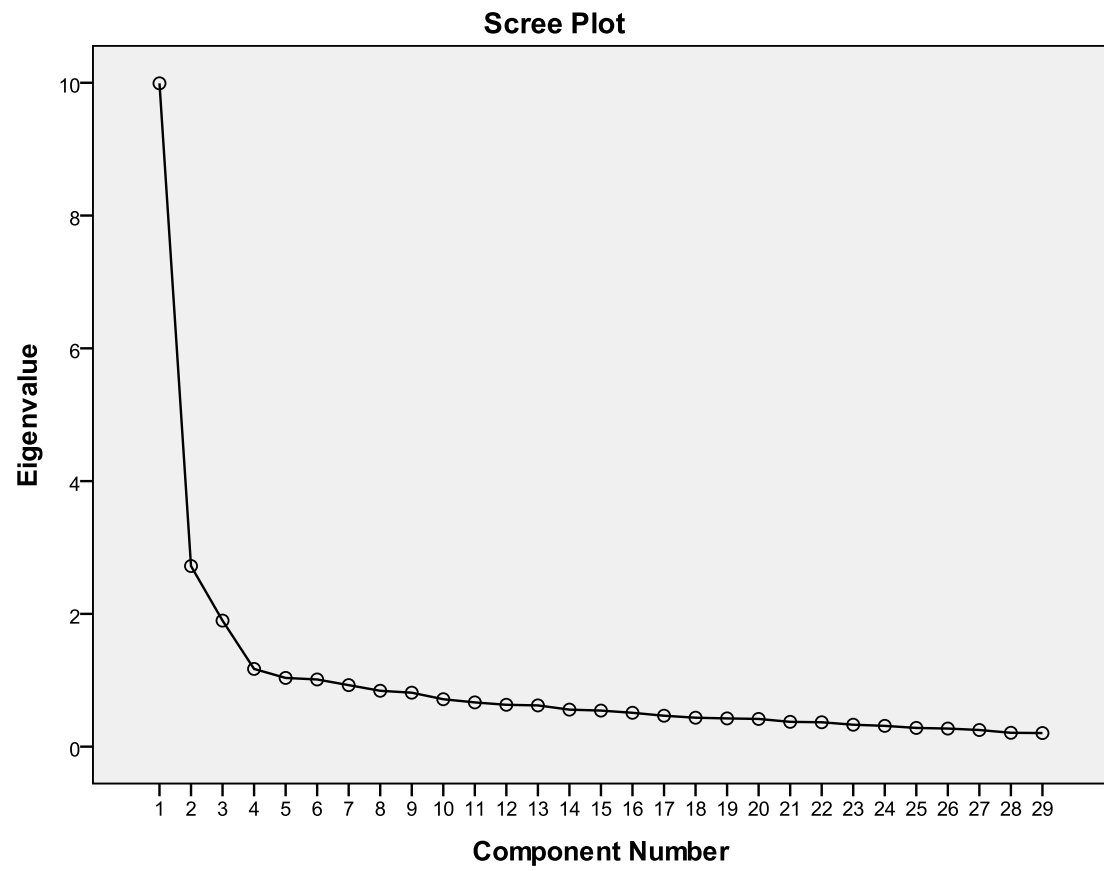
**Please now think about difficult everyday events like losing a job or the end of a relationship. In the past few years:**

		Not at all		Somewhat			Very much	
13	I experienced an event which hurt my feelings	0	1	2	3	4	5	6
14	I experienced an event I still see as very unjust or unfair	0	1	2	3	4	5	6
15	I experienced an event which I continue to think about over & over again	0	1	2	3	4	5	6
16	I experienced an event which has affected my psychological wellbeing	0	1	2	3	4	5	6
17	I experienced an event which has affected my physical wellbeing	0	1	2	3	4	5	6
18	I experienced an event which causes me to be extremely upset when I am reminded of it	0	1	2	3	4	5	6

		Not at all			Somewhat		Very much	
19	I experienced an event which I felt powerless to do anything about	0	1	2	3	4	5	6
20	I experienced an event which caused me to feel disrespected	0	1	2	3	4	5	6
21	I experienced an event which makes me feel happy when I think of the person responsible experiencing something similar	0	1	2	3	4	5	6
22	I experienced an event which made me withdraw from friends and social activities	0	1	2	3	4	5	6
23	I experienced an event which it is important not to forget	0	1	2	3	4	5	6
24	I experienced an event which triggers me to harbour thoughts of revenge	0	1	2	3	4	5	6
25	I experienced an event which led me to think there is no point in trying anymore	0	1	2	3	4	5	6
26	I experienced an event which caused me considerable resentment	0	1	2	3	4	5	6



## Appendix vi: Scree plot for initial factor analysis



### Appendix vii: Test-retest reliability values

Item	Pearson's <i>r</i>	ICC (95% CI)	Sig?
I wonder why I bother to keep going	0.77	0.74 (0.61 – 0.84)	Y
I experienced an event which made me withdraw from friends and social activities	0.75	0.75 (0.62 – 0.84)	Y
I experienced an event which makes me feel happy when I think of the person responsible experiencing something similar	0.65	0.65 (0.48 – 0.77)	Y
I haven't had the advantages that others have had in life	0.61	0.61 (0.43 – 0.74)	Y
I experienced an event which has affected my physical wellbeing	0.61	0.61 (0.43 – 0.74)	Y
I experienced an event which hurt my feelings	0.61	0.60 (0.42 – 0.74)	Y
I experienced an event which caused me considerable resentment	0.59	0.57 (0.38 – 0.71)	Y
In the end my efforts are never really appreciated	0.58	0.58 (0.39 – 0.72)	Y
I experienced an event which triggers me to harbour thoughts of revenge	0.58	0.57 (0.38 – 0.72)	Y
I feel I have got a raw deal out of life	0.56	0.55 (0.36 – 0.70)	Y
I experienced an event which I continue to think about over & over again	0.56	0.55 (0.36 – 0.70)	Y
I feel pessimistic about my future	0.53	0.54 (0.34 – 0.69)	Y
I experienced an event which has affected my psychological wellbeing	0.53	0.53 (0.33 – 0.69)	Y
I experienced an event which causes me to be extremely upset when I am reminded of it	0.53	0.53 (0.33 – 0.69)	Y
I have given up thinking that working hard is rewarded	0.52	0.52 (0.32 – 0.68)	Y
Other people always pick up on my mistakes	0.52	0.52 (0.31 – 0.68)	Y
I experienced an event which caused me to feel disrespected	0.52	0.53 (0.32 – 0.68)	Y
Nobody else really understands what I've been through	0.51	0.51 (0.31 – 0.67)	Y
I experienced an event I still see as very unjust or unfair	0.51	0.51 (0.30 – 0.67)	Y
I experienced an event which it is important not to forget	0.51	0.49 (0.28 – 0.66)	Y
I experienced an event which led me to think there is no point in trying anymore	0.51	0.51 (0.30 – 0.67)	Y
When people are especially nice, I wonder what they want	0.47	0.47 (0.25 – 0.64)	Y
Other people always seem to have better luck than me	0.45	0.45 (0.23 – 0.62)	Y

I feel frustrated that I can't do anything to change my current situation	0.44	0.43 (0.21 – 0.61)	Y
I experienced an event which I felt powerless to do anything about	0.42	0.42 (0.19 – 0.60)	Y
There is a lot that I have been prevented from achieving in life	0.23	0.22 (-0.03 – 0.44)	N

## **Appendix viii: Research Ethics Committee Approval Letter**

Lothian NHS Board

Waverley Gate  
2-4 Waterloo Place Edinburgh  
EH1 3EG  
Telephone 0131 536 9000  
Fax 0131 465 5789

[www.nhslothian.scot.nhs.uk](http://www.nhslothian.scot.nhs.uk)



06 September 2013

Miss Sarah Mills  
Trainee Clinical Psychologist University of Bath  
6 West Bath  
BA2 7AY

Dear Miss Mills,

Study title: REC reference:  
Protocol number: IRAS project ID:

An exploration of the construct of bitterness v.1 13/SS/0161  
N/A 126887

Thank you for your letter of 05/09/2103, responding to the Proportionate Review Sub-Committee's request for changes to the documentation for the above study.

The revised documentation has been reviewed and approved by the sub-committee.

We plan to publish your research summary wording for the above study on the NRES website, together with your contact details, unless you expressly withhold permission to do so.

Publication will be no earlier than three months from the date of this favourable opinion letter.

Should you wish to provide a substitute contact point, require further information, or wish to withhold permission to publish, please contact the Co-ordinator Sandra Wyllie, [Sandra.wyllie@nhslothian.scot.nhs.uk](mailto:Sandra.wyllie@nhslothian.scot.nhs.uk).

Confirmation of ethical opinion

On behalf of the Committee, I am pleased to confirm a favourable ethical opinion for the above research on the basis described in the application form, protocol and supporting documentation as revised.

#### Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see “Conditions of the favourable opinion” below).

#### Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission (“R&D approval”) should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at <http://www.rdforum.nhs.uk>.

Where a NHS organisation’s role in the study is limited to identifying and referring potential participants to research sites (“participant identification centre”), guidance should be sought from the R&D office on the information it requires to give permission for this activity. For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation. Sponsors are not required to notify the Committee of approvals from host organisations.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

You should notify the REC in writing once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. The REC will acknowledge receipt and provide a final list of the approved documentation for the study, which can be made available to host organisations to facilitate their permission for the study. Failure to provide the final versions to the REC may cause delay in obtaining permissions.

#### Approved documents

The documents reviewed and approved by the Committee are:

Document	Version	Date
Response to Request for Further Information		06 September 2013
REC application		16 August 2013
Questionnaire: Ruminative Responses Scale		
Questionnaire: Symptom Check List		
Questionnaire: STAXI - 2 items		
Questionnaire: BDI - II		
Questionnaire: Bitterness Questionnaire Draft		

## Protocol

Participant Information Sheet 2.0	04 September 2013
Participant Consent Form 2.0	04 September 2013
Other: CV - Academic Supervisor - P Salkovskis	
Other: Comments on original proposal	26 October 2012
Other: Comments on revised proposal	
Other: CV - Student - S Mills	
Other: Employers' Liability Certificate	11 July 2013
Other: Summary - in plain english Version 1	02 August 2013
Other: Professional Indemnity Letter	15 July 2013
Letter of invitation to participant 2.0	04 September 2013
Letter from Sponsor	08 August 2013
GP/Consultant Information Sheets 1.0	04 September 2013
Covering Letter	18 August 2013

## Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

## After ethical review

### Reporting requirements

The attached document “After ethical review – guidance for researchers” gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

Notifying substantial amendments Adding new sites and investigators  
Notification of serious breaches of the protocol Progress and safety reports  
Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

## Feedback

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website. Further information is available at National Research Ethics Service website > After Review

13/SS/0161 Please quote this number on all correspondence

We are pleased to welcome researchers and R & D staff at our NRES committee members' training days – see details at <http://www.hra.nhs.uk/hra-training/>

With the Committee's best wishes for the success of this project. Yours sincerely,  
Dr Lindsay Murray Vice-Chair SESREC01

Enclosures: “After ethical review – guidance for researchers” Copy to: Jane Millar,  
University of Bath  
Hannah Antoniades, Avon & Wiltshire Mental Health NHS Partnership Trust

**Appendix ix: Research & Development Approval Letter**

Our Reference: 817AWP

**Avon and Wiltshire**   
Mental Health Partnership NHS Trust

Miss Sarah Mills  
Trainee Clinical Psychologist University of Bath  
6West Bath BA2 7AY

Date: 19th November 2013

Hannah Antoniades Research and Development  
Avon & Wiltshire Mental Health Partnership NHS Trust  
Blackberry Hill Hospital Blackberry Centre  
Manor Road Fishponds  
Bristol  
BS16 2EW  
0117 378 4267

[hannah.antoniades@nhs.net](mailto:hannah.antoniades@nhs.net)

Dear Miss Mills,

Title of study: An exploration of the construct of bitterness Approval date: 19  
November 2013  
End date: 30 April 2014

Thank you very much for applying to undertake your research in AWP, we pride ourselves on a straight forward and rapid process for research governance and project management.

We are pleased to advise that we have been able to grant R&D Permission at Avon and Wiltshire Mental Health Partnership NHS Trust ("the Trust").

A condition of AWP R&D permission is to ensure you advise the department on a regular basis of the numbers you have recruited from AWP. You will be expected to provide us with the figures at the end of each financial year for the previous year. Failure to provide this information may result in your project being suspended until this information is provided.

We hope that you are successful in your recruitment aims and objectives. Please make sure that you let us know at the end of your study how it went by providing us with a copy of your final report. This way we can ensure those involved within the Trust are



aware of your findings and can consider your recommendations. Please send a copy of your final report to awp.research@nhs.net .

The R&D Permission in the Trust is valid until 30 April 2014. If you require any extension to this in the future please contact us to arrange.

The documentation listed below has been received and all the relevant governance checks have now been completed.

I am therefore happy to provide R&D Permission for the above study across all locations within the Trust parameters.

Document	Version	Date
Response to Request for Further Information		06 September 2013
REC application		16 August 2013
Questionnaire: Ruminative Responses Scale		

Continued...  
Chair  
Anthony Gallagher

Headquarters  
Jenner House, Langley Park, Chippenham. SN15 1GG

Chief Executive Iain Tulley

Questionnaire: Symptom Check List		
Questionnaire: STAXI - 2 items		
Questionnaire: BDI - II		
Questionnaire: Bitterness Questionnaire Draft		
Protocol		
Participant Information Sheet 2.0	04 September 2013	
Participant Consent Form 2.0	04 September 2013	
Other: CV - Academic Supervisor - P Salkovskis		
Other: Comments on original proposal		26 October 2012
Other: Comments on revised proposal		
Other: CV - Student - S Mills		
Other: Employers' Liability Certificate		11 July 2013
Other: Summary - in plain english	Version 1	02 August 2013
Other: Professional Indemnity Letter		15 July 2013
Letter of invitation to participant	2.0	04 September 2013
Letter from Sponsor		08 August 2013
GP/Consultant Information Sheets	1.0	04 September 2013
Covering Letter		18 August 2013

Please be aware that if there are any amendments to the above documents they must be sent to Hannah Antoniades, Research and Development Operations Manager for permission prior to use within the Trust.

You are reminded that you must report any adverse event or incident whether or not you feel it is serious, quoting the study reference number. This requirement is in addition to informing the Chairman of the relevant Research Ethics Committee. You are also required to submit to the Research and Development Operations Manager (Hannah Antoniades) a final outcome report on completion of your study, and if necessary to provide interim annual reports on progress. Should publications arise, please also send copies to Hannah Antoniades for inclusion in the study's site file.

You must also abide by the research and information governance requirements for any research conducted within the NHS:

- Work must be carried out in line with the Research Governance Framework which details the responsibilities of everyone involved in research.
- You must comply with the Data Protection Act 1998 and where required, have up to date Data Protection Registration with the Information Commissioners Office. Where staff are employed, this includes having robust contracts of employment in place and ensuring that staff are made aware of their obligations through training and similar initiatives.
- You must ensure that you understand and comply with the requirements of the NHS Confidentiality Code of Practice:  
([http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH\\_4069253](http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4069253))
- You must have appropriate policies and procedures in place covering the security, storage, transfer and disposal of information both personal and sensitive, or corporate sensitive information. Any information security breach must be reported immediately to the Trust.
- Where access is granted to sensitive corporate information, this must not be further disclosed without the explicit consent of the Trust unless there is an override required by law. Where disclosure is required under the Freedom of Information Act 2000, the Trust will assist you in processing the request.

Please note that, as a public authority, the Trust is obligated to comply with the provisions of the Freedom of Information Act 2000, including the potential disclosure of information held by the Trust in connection with this study. Where a request for potential disclosure of personal, corporate sensitive, or contract information is made under the Freedom of Information Act 2000, due regard shall be made to any duty of confidentiality or commercial interest.

Yours sincerely

Hannah Antoniades  
Research & Development Operations Manager  
Avon and Wiltshire Mental Health Partnership NHS Trust

CC: Professor Paul Salkovskis

## **Appendix x: Research Ethics Committee Amendment Approval Letter**

Lothian NHS Board South East Scotland Research Ethics Committee 01

Waverley Gate  
2-4 Waterloo Place Edinburgh  
EH1 3EG  
Telephone 0131 536 9000  
Fax 0131 465 5789



[www.nhslothian.scot.nhs.uk](http://www.nhslothian.scot.nhs.uk)

Miss Sarah Mills  
Trainee Clinical Psychologist University of Bath  
6West  
Bath BA2 7AY

Date 18 February 2014 Your Ref  
Our Ref

Enquiries to: Sandra Wyllie Extension: 35473  
Direct Line: 0131 465 5473  
Email: [Sandra.Wyllie@nhslothian.scot.nhs.uk](mailto:Sandra.Wyllie@nhslothian.scot.nhs.uk)

Dear Miss Mills

Study title: An exploration of the construct of bitterness v.1  
REC reference: 13/SS/0161  
Protocol number: N/A  
Amendment number: 01  
Amendment date: 11 February 2014  
IRAS project ID: 126887

The above amendment was reviewed by the Sub-Committee in correspondence.

Ethical opinion

The members of the Committee taking part in the review gave a favourable ethical opinion of the amendment on the basis described in the notice of amendment form and supporting documentation.

Approved documents

The documents reviewed and approved at the meeting were:

Document	Version	Date
Protocol	Version 2	10 February 2014
Notice of Substantial Amendment (non-CTIMPs)		11 February 2014
Participant Information Sheet Version 3		10 February 2014

Participant Consent Form      Version 3      10 February 2014  
Advertisement Version 1 Poster and  
Website info. 10 February 2014  
GP/Consultant Information Sheets      Version 2      10 February 2014

## Membership of the Committee

The members of the Committee who took part in the review are listed on the attached sheet.

## R&D approval

All investigators and research collaborators in the NHS should notify the R&D office for the relevant NHS care organisation of this amendment and check whether it affects R&D approval of the research.

## Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

We are pleased to welcome researchers and R & D staff at our NRES committee members' training days – see details at <http://www.hra.nhs.uk/hra-training/>

13/SS/0161: Please quote this number on all correspondence

Yours sincerely

pp  
Dr JAS Mair  
Chair

E-mail: [Sandra.Wyllie@nhslothian.scot.nhs.uk](mailto:Sandra.Wyllie@nhslothian.scot.nhs.uk)

Enclosures: List of names and professions of members who took part in the review

Copy to:                      Hannah Antoniades, Avon & Wiltshire Mental Health NHS  
Partnership Trust  
Jane Millar, University of Bath

South East Scotland Research Ethics Committee 01

Attendance at PRS Sub-Committee of the REC

Name	Profession	Capacity
Dr JAS Mair	ST3	None (Chair)
Mr Lindsay Murray	Health & Safety Manager	Lay Plus

Also in attendance:

Name	Position (or reason for attending)
Mrs Sandra Wyllie	Committee Co-ordinator

## Appendix xi: Research & Development Amendment Approval Letter



Miss Sarah Mills  
Trainee Clinical Psychologist University of Bath  
6West Bath  
BA2 7AY

Date: 14 March 2014

Hannah Antoniades Research and Development  
Avon & Wiltshire Mental Health Partnership NHS Trust  
Blackberry Hill Hospital Blackberry Centre  
Manor Road Fishponds  
Bristol  
BS16 2EW 0117 378 4267  
Hannah.Antoniades@nhs.net

Dear Miss Mills

Title of study: An exploration of the construct of bitterness v.1 NREC ref: 13/SS/0161  
Amendment no: 01  
Approval date: 14 March 2014  
End date: 30 April 2014

I am pleased to advise you that I have reviewed the amended documents (listed below) for the above study, and am happy for Avon and Wiltshire Mental Health Partnership NHS Trust to continue to be a site for this project.

I can confirm that we have received the Research Ethics Committee favourable opinion 18 February 2014 dated with the amendment approval request.

Document	Version	Date
Protocol	Version 2	10 February 2014
Notice of Substantial Amendment (non-CTIMPs)		11 February 2014
Participant Information Sheet	Version 3	10 February 2014
Participant Consent Form	Version 3	10 February 2014
Advertisement Version 1		
Poster and Website Info.		10 February 2014
GP Consultant Information Sheets	Version 2	10 February 2014

Yours sincerely,

Hannah Antoniades  
Research & Development Operations Manager  
Avon and Wiltshire Mental Health Partnership NHS Trust

## **Appendix xii: Psychology & Psychotherapy Author Guidelines**

### **Author Guidelines**

Psychology and Psychotherapy: Theory Research and Practice (formerly The British Journal of Medical Psychology) is an international scientific journal with a focus on the psychological aspects of mental health difficulties and well-being; and psychological problems and their psychological treatments. We welcome submissions from mental health professionals and researchers from all relevant professional backgrounds. The Journal welcomes submissions of original high quality empirical research and rigorous theoretical papers of any theoretical provenance provided they have a bearing upon vulnerability to, adjustment to, assessment of, and recovery (assisted or otherwise) from psychological disorders. Submission of systematic reviews and other research reports which support evidence-based practice are also welcomed, as are relevant high quality analogue studies. The Journal thus aims to promote theoretical and research developments in the understanding of cognitive and emotional factors in psychological disorders, interpersonal attitudes, behaviour and relationships, and psychological therapies (including both process and outcome research) where mental health is concerned. Clinical or case studies will not normally be considered except where they illustrate particularly unusual forms of psychopathology or innovative forms of therapy and meet scientific criteria through appropriate use of single case experimental designs.

#### **1. Circulation**

The circulation of the Journal is worldwide. Papers are invited and encouraged from authors throughout the world.

#### **2. Length**

All articles submitted to PAPT must adhere to the stated word limit for the particular article type. The journal operates a policy of returning any papers that are over this word limit to the authors. The word limit does not include the abstract, reference list, figures and tables. Appendices however are included in the word limit. The Editors retain discretion to publish papers beyond this length in cases where the clear and concise expression of the scientific content requires greater length (e.g., a new theory or a new method). The authors should contact the Editors first in such a case.

Word limits for specific article types are as follows:

- Research articles: 5000 words
- Qualitative papers: 6000 words
- Review papers: 6000 words
- Special Issue papers: 5000 words

#### **3. Brief reports**

These should be limited to 1000 words and may include research studies and theoretical, critical or review comments whose essential contribution can be made briefly. A summary of not more than 50 words should be provided.

#### **4. Submission and reviewing**

All manuscripts must be submitted via <http://www.editorialmanager.com/paptrap/>. The Journal operates a policy of anonymous peer review. Before submitting, please read the [terms and conditions of submission](#) and the [declaration of competing interests](#).

#### **5. Manuscript requirements**

- Contributions must be typed in double spacing with wide margins. All sheets must be numbered.
- Manuscripts should be preceded by a title page which includes a full list of authors and their affiliations, as well as the corresponding author's contact details. A template can be downloaded [here](#).
- Tables should be typed in double spacing, each on a separate page with a self-explanatory title. Tables should be comprehensible without reference to the text. They should be placed at the end of the manuscript with their approximate locations indicated in the text.
- Figures can be included at the end of the document or attached as separate files, carefully labelled in initial capital/lower case lettering with symbols in a form consistent with text use. Unnecessary background patterns, lines and shading should be avoided. Captions should be listed on a separate sheet. The resolution of digital images must be at least 300 dpi.
- For articles containing original scientific research, a structured abstract of up to 250 words should be included with the headings: Objectives, Design, Methods, Results, Conclusions. Review articles should use these headings: Purpose, Methods, Results, Conclusions.
- All Articles must include Practitioner Points – these are 2-4 bullet points, in addition to the abstract, with the heading ‘Practitioner Points’. These should briefly and clearly outline the relevance of your research to professional practice.
- For reference citations, please use APA style. Particular care should be taken to ensure that references are accurate and complete. Give all journal titles in full and provide DOI numbers where possible for journal articles.
- SI units must be used for all measurements, rounded off to practical values if appropriate, with the imperial equivalent in parentheses.
- In normal circumstances, effect size should be incorporated.
- Authors are requested to avoid the use of sexist language.
- Authors are responsible for acquiring written permission to publish lengthy quotations, illustrations, etc. for which they do not own copyright.
- Manuscripts describing clinical trials must be submitted in accordance with the CONSORT statement on reporting randomised controlled trials (<http://www.consort-statement.org>).
- Manuscripts describing systematic reviews and meta-analyses must be submitted in accordance with the PRISMA statement on reporting systematic reviews and meta-analyses (<http://www.prisma-statement.org>).

For guidelines on editorial style, please consult the [APA Publication Manual](#) published by the American Psychological Association.

## 6. Multiple or Linked submissions

Authors considering submitting two or more linked submissions should discuss this with the Editors in the first instance.

## 7. Supporting Information

PAPT is happy to accept articles with supporting information supplied for online only publication. This may include appendices, supplementary figures, sound files, videoclips etc. These will be posted on Wiley Online Library with the article. The print version will have a



note indicating that extra material is available online. Please indicate clearly on submission which material is for online only publication. Please note that extra online only material is published as supplied by the author in the same file format and is not copyedited or typeset. Further information about this service can be found at <http://authorservices.wiley.com/bauthor/suppmat.asp>

## 8. Copyright and licenses

If your paper is accepted, the author identified as the formal corresponding author for the paper will receive an email prompting them to login into Author Services, where via the Wiley Author Licensing Service (WALS) they will be able to complete the license agreement on behalf of all authors on the paper.

### **For authors signing the copyright transfer agreement**

If the OnlineOpen option is not selected the corresponding author will be presented with the copyright transfer agreement (CTA) to sign. The terms and conditions of the CTA can be previewed in the samples associated with the Copyright FAQs below:

CTA Terms and Conditions [http://authorservices.wiley.com/bauthor/faqs\\_copyright.asp](http://authorservices.wiley.com/bauthor/faqs_copyright.asp)

### **For authors choosing OnlineOpen**

If the OnlineOpen option is selected the corresponding author will have a choice of the following Creative Commons License Open Access Agreements (OAA):

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